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THE ILLUSTRATED LONDON NEWS

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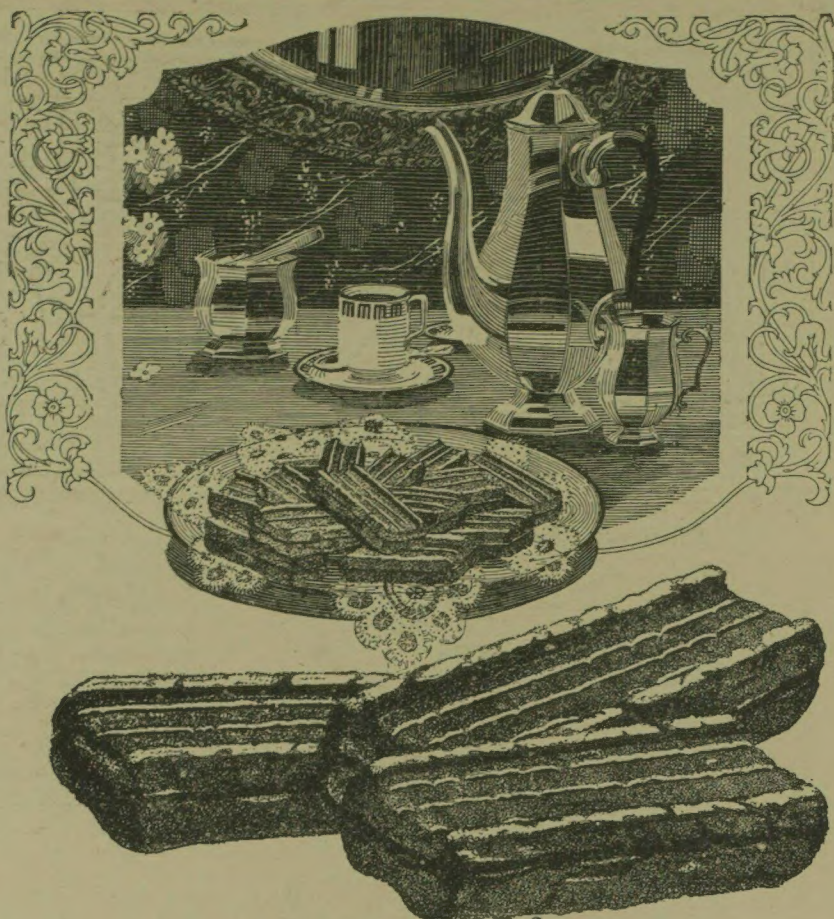
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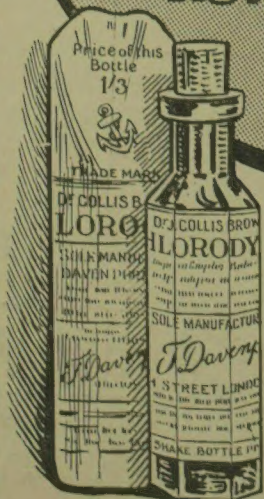


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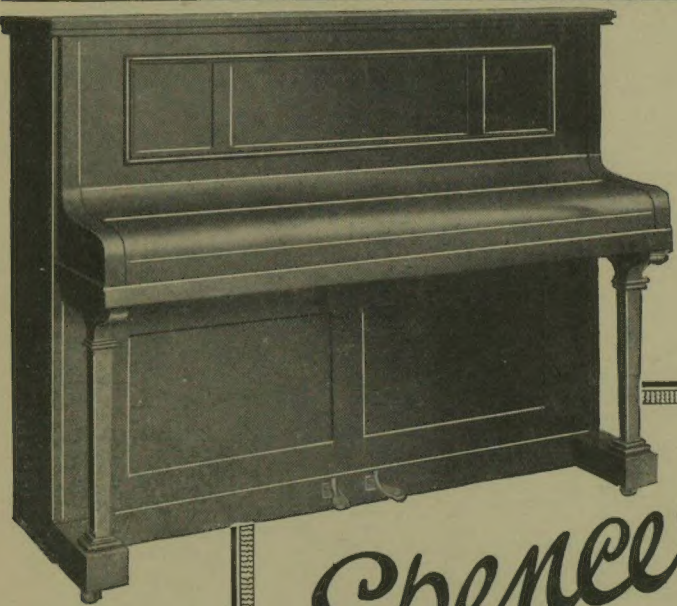
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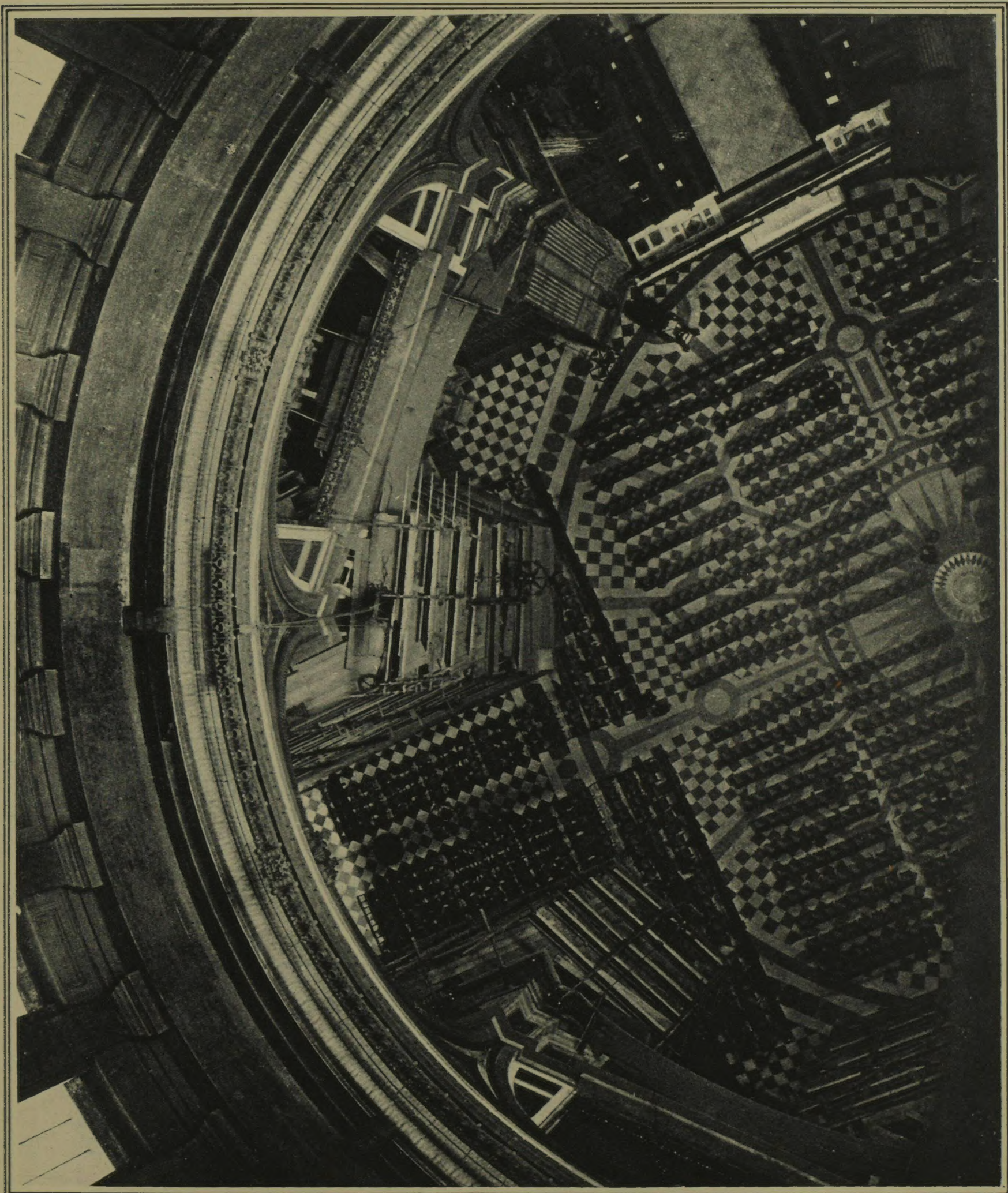
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THE ILLUSTRATED LONDON NEWS

REGISTERED AS A NEWSPAPER FOR TRANSMISSION IN THE UNITED KINGDOM AND TO CANADA AND NEWFOUNDLAND BY MAGAZINE POST.

SATURDAY, JANUARY 17, 1925.

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A CAUSE OF PUBLIC ANXIETY: ST. PAUL'S CATHEDRAL—A REMARKABLE VIEW FROM THE OPENING IN THE FALSE DOME DOWN TO THE FLOOR, SHOWING PART OF THE CENTRAL SUN DISC OVER NELSON'S TOMB.

Signs of instability in St. Paul's have for some years been a cause of anxiety, and this was intensified recently by the fact that a district surveyor of the City Corporation served a formal notice upon the Cathedral authorities, under the Dangerous Structures Clauses of the Building Act of 1894, requiring the eight piers of the dome to be taken down and replaced. Although this notice was a formality,

it has brought home to the public the gravity of the position, and strengthened the appeal for funds to make the Cathedral safe. The Lord Mayor has stated that there is no danger of a catastrophe. On other pages we illustrate the nature of the cracks and flaws discovered, and the steps being taken to remedy them. A similar view of the interior to that above appeared in our issue of December 29, 1923.

PHOTOGRAPH BY THE "TIMES."



By G. K. CHESTERTON.

I HAD occasion recently to say, in connection with another journalistic function or project, that much journalism was antediluvian. I did not mean to speak disrespectfully of antediluvian monsters; after all, the Ark was antediluvian, only it managed to be postdiluvian also. I will not press the parallel of the Deluge and the Great War, though a pleasing parable might be suggested about social types going into the Ark two by two—two millionaires, two moneylenders, two politicians male and female. The story need not be elaborated. But anyhow, I said in the same connection that journalism was too much concerned with "Socialism before Bolshevism, Parliamentarism before Fascism, and Imperialism before Aviation." A critic complained of this, claiming that his own paper had discussed Bolshevism, had not failed to mention Fascism, and had often alluded to Aviation. The same writer objected to any reference being made to Mr. Shaw or Mr. Wells, as being figures too venerable and Victorian for his own Futuristic and fantastic taste. As it happens, I did not make any particular references to Mr. Shaw or Mr. Wells; but I was a little amused, for the paper in question would never have struck me as one content with nothing less than the flaming novelties of Michael Arlen or James Joyce. But I gather that this particular paper must have been going it and painting the town pink while we three aged Victorians were in bed.

But, touching the matter of the pre-war prejudices of the Press, I think the critic has rather missed the point. When I said that our journalists deal with Socialism before Bolshevism, I did not exactly mean that I had wandered in this vale of tears through the year 1924 without ever having heard the word "Bolshevist." When I said that they dealt with Imperialism before the new conditions of aviation, I did not mean that nobody but myself had ever seen an aeroplane. I have seen the word Bolshevism, that rare and remarkable Russian phrase, printed in the newspapers; I have even seen rather too much of it. I know that aeroplanes have been seen lately; I have even seen pictures of them in the illustrated papers. What I meant was, not that journalism did not discuss these things, but that it does not discuss the real way in which they have changed the world. It talks about Bolshevism exactly as it used to talk about Socialism. It does not see the real difference that Bolshevism has made to Socialism. Similarly, it knows that we have now an air service as well as an army and navy; but it does not realise the difference that it has really made to the position of our army and navy—especially our navy. It still talks as if the imperial and international position of England were merely that of one of the great maritime commercial empires like Carthage or mediæval Venice. To put it shortly, it knows we have now one weapon more, but hardly realises that we have one weapon less.

Let us take the case of the Bolshevik problem as an example. The real lesson of the Russian story is the very reverse of that generally alleged. The real argument against Bolshevism is the very opposite of the old argument against Socialism. Men may, indeed, have dropped more or less, without knowing why, the very unreal argument. I mean the old view that communism is a Utopia too good for this world; that it is something very beautiful and ideal which unfortunately cannot happen. As a fact, it is something very real and ugly that did happen. It is not, as the Anti-Socialists used to say, a thing that may or may not

come in thousands of years, when the world is sufficiently good. It is a thing that may come quite suddenly, because the world is quite sufficiently bad. But they do not know why it can come suddenly. They do not know what is bad. It is the very thing they probably think good. The danger lies in all that they think most respectable—because most rich. The reason why the Bolshevik dictatorship could come so suddenly and successfully, in the Russian towns, is that the whole nature of the big modern towns is much nearer to it than most people realise. In other words, capitalism and communism are really not opposites at all. Capitalism and communism are very much alike, especially communism, as the Irishman said. They are alike, because they both imply an impersonal centralisation and the wielding of wealth in great masses and over large and vague areas. The thing that really contradicts communism is not capitalism, but small property as it exists for a small farmer or a small shop-keeper. It does not take very much to change a large store into a State department; it is almost a matter of official forms. It may take a civil war

individual peasant, Bolshevism and Big Business are on the same side.

That is one of the lessons to be learnt from Bolshevism in practice as distinct from Socialism in theory. But I have never seen newspapers preaching that moral. I have never seen the *Daily Mail* warning all men to beware of capitalism because it smooths the path for communism. I have never known the *Times* sounding an alarm against banks and bankers; yet, by the test of true individualism, a bank is much more impersonal than a Soviet. I have never known the *Spectator* call down fire from heaven upon business men because business methods are always bringing us nearer to Bolshevism. All this side of the question is neglected, because men cannot shake off their old pre-war habit of thinking of Socialism as something infinitely idealised and infinitely distant. Even when they feel it to be near to us in practice, they still think of it as being infinite remote from us in theory. They may be afraid of it as a material interruption, but they are not afraid of it as a logical conclusion. They do not see that it is very near to their own current notions and not merely to their occasional nightmares.

I will give one example of what I mean. Whenever there is any danger of a strike in the train or tube service, there is one interminable refrain in all the organs of the Press, but especially in those which rather specialise in denunciations of Socialism. It is said over and over again: "The public has its rights in this matter; the strikers have no right to hold up the public; they should do their duty to the public," and so on. All the Anti-Socialist papers use this argument; and none of the Anti-Socialist papers sees that the argument leads straight to Socialism. If the workers ought solely to serve the public, they ought to be public servants. The truth is that the construction and system of a modern town really is very socialist and even very communist. It is in some ways much easier and more natural to apply communist theories than individualist theories to it. And the capitalist papers do apply communist theories to it. The industrial town has evolved three-quarters of the way towards Socialism without knowing it. That is why it is such an unpleasant place. And that is why a blow or a brief *coup d'état* could bring a Bolshevik tyranny to the top in the Russian towns; and why it was brought to a standstill by the threat of civil war in the

Russian countryside. And that is why, above all, our own journalists are never so blind to the real Bolshevik danger as when they are screaming day and night about the danger of Bolshevism.

They are screaming about how big the revolution will be that will swallow us up in the terrible system of Trotsky. What we ought to consider is how small the revolution needs to be to transform our world into Trotsky's. We have all the centralisation, all the elaboration, all the excuse. We already have a communal machinery; it is almost a matter of a button being pressed or a handle turned at headquarters. It is not the great change that we have to fear. It is the tiny invisible change that should fill us with terror. In a word, it would be really much easier to turn the modern business state into a Bolshevik state than to turn it into one of real liberty and property. That is what people mean when they tell us our own ideal of liberty and property is impossible. If it is impossible, there is no doubt about what is inevitable.



THE CHANCELLOR OF THE EXCHEQUER ARRIVING IN PARIS FOR THE CONFERENCE OF ALLIED FINANCE MINISTERS: MR. CHURCHILL WELCOMED AT THE GARE DU NORD BY M. CLÉMENTEL (NEXT TO RIGHT) THE FRENCH FINANCE MINISTER.

Mr. Churchill arrived at the Gare du Nord in the evening of January 6, accompanied by the whole British delegation, comprising Mr. Walter Guinness, Financial Secretary to the Treasury; Sir Otto Niemeyer, Controller of Finance at the Treasury; Mr. Leith Ross, of the Reparations Commission; Mr. P. J. Grigg, Private Secretary to Mr. Churchill; Lord Wodehouse, his Assistant Private Secretary, and Mr. F. Phillips. They were met on the platform by M. Clémentel, Minister of Finance, while Mr. Eric Phipps, Counsellor of the British Embassy, and the Hon. G. H. C. Chichester, represented the British Ambassador. The Conference opened on the 7th, and considered a draft agreement on the 13th. Much preparatory work was done in private conversations during the intervals between the plenary sessions.—[Photograph by C.N.]

to change a small farm into a state farm: for that is to stamp out the independence and individualism of a peasantry.

All this was, of course, illustrated vividly enough in the later phases of the Russian Revolution. Trotsky and his group actually appealed to ordinary capitalism to come to the rescue of the new communism. Lenin actually said, with admirable intellectual clarity and sincerity: "Russia is again a capitalist country." And he or one of his friends added, I believe, this supremely significant phrase: "Even capitalism is better than mediævalism." By mediævalism he meant the old moral tradition, generally to be found side by side with the old religion, that a man's house should be his own, and that it is no disgrace to the farmer to be proud of the farm. It was to destroy that real sense of private property, of a property that is really private, that the Bolshevik dictators called in foreign capital and business methods; feeling, very rightly, that, in face of the resistance of the

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A CENTRE OF WINTER SPORT SOCIETY: ST. MORITZ—AN UNUSUAL VIEW.

PHOTOGRAPH BY KEYSTONE VIEW CO.



"AN ARCH WHERETHRO' GLEAMS THAT UNTRAVELL'D WORLD": A GENERAL VIEW OF ST. MORITZ FROM THE TUNNEL OF THE FUNICULAR RAILWAY AT CHANTERELLE.

St. Moritz just now should perhaps be described as a much-travelled rather than an "untravell'd world," in the poet's phrase, for it is full of Society people who have gone to the Engadine to enjoy the delights of winter sport and the incidental entertainments. Among recent events of a sporting character there may be mentioned the ice-hockey match on January 6 between Oxford and the "Lion Lions," in which the latter won by four goals to three. In a report of the

climatic conditions at that time it was stated that the weather remained fine and clear, while on the upper slopes of the mountains snow was abundant, although the lower slopes were almost bare. The British Ski Championship, which was to have been held at Pontresina, had consequently been again postponed. Another winter sport event was the Curling competition for the Gossage trophy on the Kulm rinks on January 9.

BOOKS OF THE DAY.

By J. D. SYMON.

YOUR old soldier and your sportsman—the two are usually combined—have in nine cases out of ten a most agreeable way with them when they take to writing. Unspoiled by literary professionalism, but trained, as it were, by a lifetime of good and entertaining conversation of the after-dinner and club-fireside kind, they set down their reminiscences in an easy gentlemanly style, free alike from frills and self-consciousness, and the result is a racy, companionable book, full of matter, because the writers are men who have seen things, and tactful, because they are informed with the shrewd worldly wisdom that comes from long handling of all sorts and conditions of men.

At the top of such books I am always inclined to place Lord Roberts's "Forty-One Years in India" as the best type of its kind. But their name is legion. It defies the critic to analyse the style—all that can be said of it is that one recognises it at sight, and that works of this sort possess some common factor which places them in a class by themselves. When these men of affairs take up the pen, what they give us is not so much writing as good talk that communicates a personality, and, if this personality betrays some uniformity, that is possibly due to the fact that servicemen are more or less moulded to one pattern. Be that as it may, they have a happy knack of writing reminiscences. Their peculiar gift is fundamentally that which made Goldsmith's humbler veteran so welcome to the village fireside when he "shouldered his crutch, and showed how fields were won."

It is not necessary that the author should be actually a veteran. Soldier-sportsmen not yet on the retired list, and still far from the period of grey hairs and arm-chair reflection, have written excellent chapters of lives from which the sere and yellow leaf is still happily distant. One such book now before me I have been reading together with another which falls into the veteran class, and very entertaining they both are. The former is a record of a sporting tour so extensive that it embraces the entire globe; the latter a soldier's autobiography, unfortunately left unfinished by the author, but edited and completed by a judicious hand. To take the sporting book first. Its title, which should certainly find a place on your library list, is "ROUND THE WORLD WITH ROD AND RIFLE," by Major P. M. Stewart (Butterworth; 21s.). Although it cannot be called an elderly book, it may still claim to be the work of a veteran sportsman, for it is the record of twenty years' experience in sport of the most adventurous kind.

Major Stewart plunges at once in *medias res*, and without superfluous preamble introduces his readers to the thrills of elephant-shooting. He tells a really hair-raising story of how he was charged by a cow elephant in a place where there was no sort of cover to be had. He confesses that he lost his head completely, and but for the coolness of his native loader, who twice handed him fresh weapons, might have come to grief. He fired three shots wildly, and to his surprise the great beast came tumbling to earth. By "an incredible piece of luck," the first bullet had broken the animal's right leg. Major Stewart, firing with his left eye open, had missed the centre of the chest, and pulling, not pressing, the trigger had made him fire low, with the fortunate result that he bowled over his quarry. In the opinion of the most experienced hunters, one can never be sure of stopping a charging elephant, even with the best and most powerful modern rifles.

The book is nothing if not various. In the next chapter, and in another later, Major Stewart describes an equally exciting but very different sport—shark-fishing in the Pacific. These battles of rod and line may be called quite fairly Herculean, and even the salmon-fisher, who knows the ultimate toil and ecstasy of the tussle with *salmo salar*, will be fain to acknowledge that Major Stewart's fights with the shark are on a larger scale than the toughest experiences he may know. The author relates them with great humour, and there are incidentals which the ordinary fisherman is mercifully spared, notably the difficulty of disposing of the carcass. On one occasion Major Stewart found himself up against the public authority and likely to get into trouble for having landed a nuisance. The disposal of the shark led to a comic interlude with a cabman, and the parting with much backsheesh, before the late shark's head was finally conveyed to Auckland Museum, where the curator agreed to set it up for the moderate sum of £3, in spite of its unpleasant condition. A drawing of the head, reproduced in gold outline, now adorns the back of the book.

With Major Stewart for guide, you will hunt the hippo and the crocodile in Central Africa, and the rhinoceros in Rhodesia; you will enjoy deer-stalking and pig-hunting in

New Zealand, and black-buck shooting in India. He has delightful chapters on travel and sport in Canada, and in Florida he tells of his combats with sword-fish. He has had experience with man-eating lions, has shot the lechwe in the swamps of Lake Bangweulu, and has caught the tarpon in Mexico. No region of the earth but is full of his labours. The book is admirably illustrated, although it is rather a pity that one or two of the more sensational drawings by Mr. Caton Woodville have been inspired by passages which the author quotes from the records of other hunters. It may be purism, but one prefers that all the pictures in a volume of travel should relate to the author's own experiences. This, however, is a detail, and there is enough original adventure here to satisfy the greediest. Sportsmen will find the book full of useful information about localities and methods.

The autobiography already mentioned is "THE MEMOIRS OF MAJOR-GENERAL SIR HUGH MCCALMONT" (Hutchinson; 21s.), the life-story of a soldier, sportsman, and Parliamentarian who was a notable figure in his day. Sir Hugh was an Irishman of a type that is rarer nowadays, and there is more than a touch of Charles O'Malley rackettiness in his stories of his youth. These are very genial and agreeable. When he was a young Captain in the 9th Lancers on duty in Ireland, he was seized with a sudden impulse to be present at the Derby (Pretender's year), but he did not think of it until the limit of time had run too fine. Not to be balked, however, he made a bet on the affair, and accomplished a veritable Lutzow's wild ride from Newbridge to Dublin in just over 1 hour and 25 minutes for the twenty-five miles. There he stuck, for, although he was prepared to charter a special steamer, the L. and N.W.R. had not a vessel handy that night, and Epsom next day was out of the question. McCalmont had to return to quarters and confess defeat, but, not to be done altogether, he made another bet that he would ride the stretch from

front of the trench, the reason being that this made it very difficult for the troops to get out of the position without serious danger. A high parapet and a very low (or no) parapet was supposed to induce the men to sit tight and fight it out. At that time Turkish *moral* was far from high, pay being nineteen months in arrear.

One note of Sir Hugh McCalmont's is of special interest to this journal. Writing home on July 11, 1877, he says—

Kars is quite the most interesting place in the world at present. The bombardment ceased the day before yesterday; luckily I got in three days before. I spent an hour in the Mukhlis battery and took *The Illustrated London News* man there to see the fun—which astonished him. He is sending a sketch of his first experience of a shell.

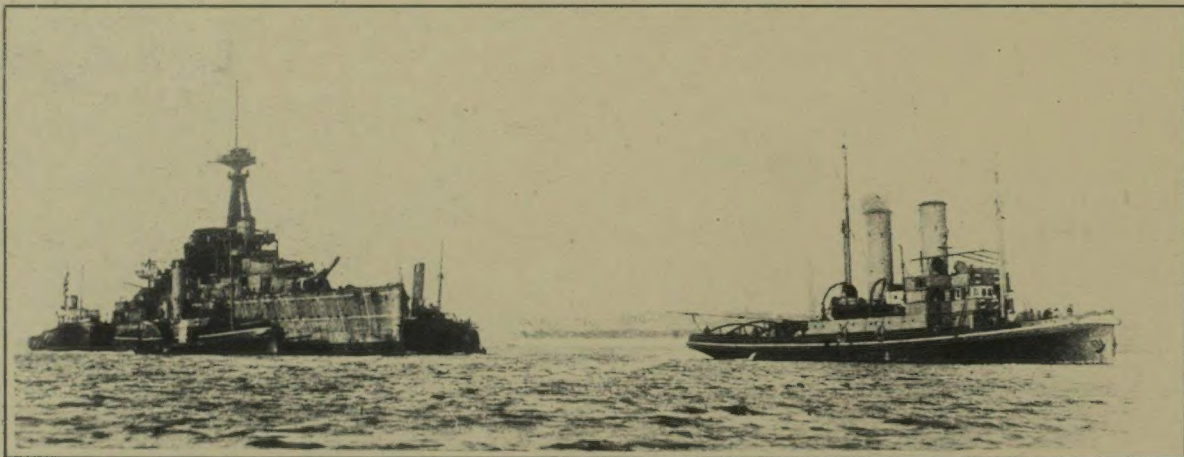
This cannot have been Mr. Melton Prior, who had already smelt powder and had encountered at Bucharest a shell of which he bore the marks as long as he lived; *me teste*, for I have seen the scars on his leg. I commend these Memoirs to all who enjoy good stories of camp, turf, society and senate, picturesque narrative and writing that reflects the personality of the author. Major-General Sir E. Callwell has edited Sir Hugh's papers, and writes the supplementary chapters.

From the exciting adventures of Major Stewart in the world of "animated nature" (I like to use Goldsmith's phrase) the reader enters quieter paths in opening "SECRETS OF BIRD LIFE," by H. A. Gilbert and Arthur Brook (Arrowsmith; 10s.). Of this book I cannot speak from knowledge of ornithology, and therefore can only say that to the inexpert it seems to fulfil its avowed purpose, which is "to instruct that large body of persons who know little about birds." The authors "propose to try to describe the birds they have seen in such a way as to make non-bird lovers realise what interesting things they will see if they really try." Nor is the sporting element absent, for Messrs. Gilbert and Brook say that they consider bird-photography the best sport in the world.

Here are results of their hunting in many beautiful photographs, such as that of the common gull alighting on her nest, the taking of which, as described, proves sufficiently that bird-photography can be a sporting event enough. Another most interesting picture is that of a raven feeding six young ones. The amount of food the parent birds carry is surprising. A full load of carrion, conveyed in the pouch under the throat, must weigh certainly a pound or more. The raven is

always difficult to photograph, but it is impossible to do anything with a pair that has been shot at near the nest. The authors know, however, of two unmolested pairs in Wales. To get at these is an arduous undertaking. Neither of the sportsmen feels happy on a cliff. "One admits himself to be a real cliff funk, and the other feels like a whole herd of Gadarene swine every time he feels his weight go on the rope." But they are prepared to go anywhere for a good photograph. This pleasant volume is evidence of their patience, perseverance, and daring. I only wish I knew enough about the subject to praise the work with authority. There can be no doubt, however, of its power to attract and to stimulate the ignorant to a closer knowledge of bird-life.

No better companion to the foregoing volume could be imagined or desired than Mr. H. J. Massingham's charming little work, "SANCTUARIES FOR BIRDS" (G. Bell and Sons; 5s.). This also is designed to allure those who own or lease a plot of land to make a bird-sanctuary of it and so enrich life by a deeper sympathy with and understanding of winged nature. Mr. Massingham—who inherits the gift of excellent writing from his lamented father, that excellent penman, whom English literary journalism could so ill spare—explains what a bird-sanctuary is and how to make one. With this he interweaves occasional quaint analogies of social philosophy and a great store of bird lore, communicated with the sympathetic touch of a true lover of birds. Yet he confesses that a "pet Eden" is not his idea of a sanctuary. "I once" (he says) "saw a peregrine kill a pigeon in mid-air in the flash of a moment, and my heathen soul wasted no pity on the pigeon. . . . What is one of the chiefest jewels in the sanctuary's crown? To have given haven to some rare and persecuted outlaw, whose value is in inverse ratio to his rarity, and for myself I have no doubt that I would rather have one pair of peregrines nesting in my sanctuary than all the pigeons in the country." This humane and persuasive book, at once ideal and practical, should do good alike to birds and to mankind.



A DOOMED BRITISH BATTLE-SHIP ON THE FIRST STAGE OF HER WAY TO "EXECUTION": H.M.S. "MONARCH" LEAVING PORTSMOUTH HARBOUR FOR THE LAST TIME.

As mentioned in our last issue, where we gave another photograph of her, the "Monarch" is to be sunk in accordance with the Washington Treaty, and she is here seen being towed out of Portsmouth Harbour by five tugs. The white cross-lines on her hull were no doubt made in connection with her use as a gunnery target. It was stated that she would wait at Plymouth until the Atlantic Fleet (which is to sink her by gun and torpedo fire) left Portland on January 15, when she would be towed to the place at sea appointed for her fate. The sinking was expected to take place on the 16th.—[Photograph by Photopress.]

Newbridge to Islandbridge Barracks in Dublin in 1 hour and 20 minutes. This time he won, and even beat his stipulated time by 4 minutes and 28 seconds.

These lively escapades of youth soon give place in the book to the serious records of the old campaigner, but through all the stories runs the irrepressible spirit of the narrator. He is delightfully frank about himself, and tells at his own expense how on his first taste of soldiering—the Red River Expedition to put down Louis Riel's first rebellion—he made a strange *faux pas*, which is accounted for only by his newness to the job. Wolseley had paid him the compliment of entrusting him with his final despatches, which should have been delivered personally at headquarters in Montreal. But on reaching St. Paul Sir Hugh sent on the packet by registered post, and went coolly home to join the 7th Hussars, to which he had just been posted by exchange from the 9th Lancers. There was some scandal, but McCalmont does not seem to have got into any scrape over the unconventional affair. He recalls, however, with a touch of humorous compunction, that in old days an officer who brought home the final dispatches of a victorious commander used to receive special promotion and a substantial pecuniary reward. He adds that thirty years later a medal was issued for the Red River operations and he received his in due course.

Sir Hugh's long record of service includes campaigns in Ashanti, South Africa, and Egypt. He was an attaché to the Ottoman forces in Armenia during the Russo-Turkish War, and watched the operations around Kars. His campaigning pictures have that leisurely quality which characterised the descriptions of "battles long ago," before war-correspondence became next to impossible. At Kars, Turks and Russians had a tacit understanding that there should be no firing between 12 o'clock and 2, so that both sides might enjoy their mid-day meal and their siesta in peace. The Turks, in making earth-works, threw the excavated soil up behind, and not in

"CUTTING IT FINE ON THE CRESTA RUN": A WINTER SPORT THRILL.

DRAWN BY HOWARD K. ELCOCK.



DESCENDING THE MOST FAMOUS OF ICE-RUNS, AT ST. MORITZ: TAKING A CORNER SHARPLY ON THE CRESTA.

The Cresta Run at St. Moritz, where tobogganing and other winter sports are now in full swing, is the most famous of artificial ice-runs. The course, which is over 1300 yards long, has been traversed in about 60 seconds. "Down each side of the narrow racing track," writes Mr. E. F. Benson in his "Winter Sports in Switzerland," "are little walls of firm-built snow, also iced, so that the runner, if he is going moderately straight, cannot leave the track, though he often comes

into slight collision with these walls. But even slight collisions when travelling at a speed that sometimes exceeds 70 miles an hour are not experiences to be encountered unarmed, and the elbows and knees are thickly protected by felt pads, while on the toes of his boots are toothed rakes made of steel, used to guide the runner round the bank and check his speed if it is so excessive that he would run over the banks."—[Drawing Copyrighted in the United States and Canada.]

THE "OFFICIAL END" OF TWELVE MONTHS' VOYAGING: R.M.S. "AQUITANIA" RETURNS HOME.

DRAWN BY FRANK H. MASON, R.B.A.



"THE 'AQUITANIA' COMPLETED THE LAST STAGE OF HER VOYAGE ON A SMOOTH, ON A "MYSTERY TOWER" (SEEN IN THE LEFT CENTRE) ON

The great Cunard liner "Aquitania" concluded a very eventful "round trip" on January 9, when she reached Southampton from New York. Sailing for New York on Christmas Eve, she ran into very tempestuous weather, and, though she behaved like the world's wonder ship that she is, the wild storms and heavy seas which she encountered may excuse the groundless rumours which were at one time current about her safety. The usual festivities had to be curtailed on Christmas Day, but they were postponed only, and the gigantic Christmas tree was duly relieved of its load of presents shortly before New York was reached. On her return voyage the famous liner again encountered heavy weather. A severe blizzard was raging when she left New York, and the American passengers not unnaturally expected, after a real winter crossing, to find England under snow. Their surprise may be imagined when the

MOONLIT SEA": THE FAMOUS CUNARDER PASSING THE NAB LIGHT, NOW PLACED HER RECENT RETURN TO SOUTHAMPTON FROM NEW YORK.

"Aquitania" completed the last stage of her voyage on a smooth, moonlit sea. But for the very definite "nip" in the air, the scene was singularly peaceful, and the conditions of sky and sea were those of a night in the tropics. Our artist, Mr. Frank H. Mason, R.B.A., who was on board, shows the "Aquitania" passing the Nab Light, and thus reaching the "official end" of her run. At the Nab Light, now situated on one of the war-time "mystery towers" (seen in the left centre of the drawing), which has replaced the former lightship, the pilot takes charge, and in a figurative sense the captain "downs tools." The Nab is the point from which all Transatlantic records of time and distance are taken which concern Southampton. During 1924 the "Aquitania" made more crossings of the Atlantic than any other liner.—(Drawing Copyrighted in the United States and Canada.)

Sherlock Holmes Eclipsed by Reality.

RECENT APPLICATIONS OF SCIENCE TO CRIMINAL INVESTIGATION.

By C. AINSWORTH MITCHELL, M.A. F.I.C.

EVERY new discovery in science soon finds a place among the methods of criminal investigation. In fact, on more than one occasion the use of a scientific invention to outwit a criminal has focussed the attention of the world upon its latent possibilities. For instance, the value of the telegraph was not generally recognised until it had been employed to capture a murderer in 1843; and everyone will recall the dramatic situation on the S.S. *Montrose*, when the whereabouts of Crippen and his companion was made known to the world by means of wireless telegraphy, while the fugitives remained blissfully unconscious of their discovery.

Photography has long been recognised as one of the most valuable aids to criminal investigation, not only as a means of detection and identification, but also for demonstrating in Court the microscopical appearance of such objects as hairs, fibres of fabrics, and the pigments in writing. Some description of its various uses for this purpose was recently given by the writer in a lecture to the Camera Club, and attention was also directed to some of its drawbacks.

Although there are numerous instances on record in which photography has failed as a means of identification—for it is probable that most persons could be mistaken for someone else—yet it narrows down the limits of search, and is a valuable adjunct to the only certain means of identification—the finger-print system.

The permanence and immutability of the patterns on the friction surface of the skin have now been firmly established. Even removal of the skin by friction or by burning will not alter the character of the pattern. An interesting proof of this is afforded by the photographs (Fig. 6) of a series of finger-prints made by Mr. B. Wentworth, of Dover, U.S.A. In the top left-hand corner is shown the original finger-print; next to it is a print of the same finger on which the pattern has been obliterated by a burn. The bottom left-hand print shows the skin pattern in process of recovery; and, lastly, there is a print of the finger completely healed, showing all the intricate lines of the pattern restored exactly as before.

Not only is the outline of the pattern unchangeable, but the pores on the ridges are also distinctive in size, shape, and position, as is shown in the enlargement (Fig. 9), also due to Mr. Wentworth. By determining the number of points of resemblance

prints from any part of the palm of the hand. The patterns upon the soles of the feet are as characteristic as those upon the finger-tips, and the method of sole-printing is now used systematically



FIG. 1.—WITH THE FACE RECONSTRUCTED IN PLASTICINE ON THE SKULL OF A SKELETON FOUND IN A CELLAR, AND RECOGNISED BY FRIENDS OF THE DEAD MAN (DOMINICK LA ROSA): THE FIRST USE OF A REMARKABLE METHOD OF IDENTIFICATION; BY THE NEW YORK POLICE.

This remarkable example of identification by applied cranology is described in the accompanying article. The plasticine restoration was made by Mr. Grant Williams and the Pacinis (father and son), of the New York Police.

Photograph by Mr. B. Wentworth, of Dover, U.S.A.

for the registration of babies in the Maternity Hospital at Chicago. The distinctive patterns are mainly on the toes, and it is very rare to find a pattern upon the heel. Only about a dozen instances of such "calcar patterns" have been recorded, and two of these, sent to the writer by Professor Wilder, are shown here (Figs. 4 and 5). Anyone having such a pattern on the heel is a marked person.

The patterns on the foot-pads of animals are, as

a rule, too rudimentary for identification purposes excepting in the case of some of the higher apes, but the skin patterns on the noses of animals are often more differentiated, as will readily be seen in the nose-prints of the two young Jersey heifers (sisters), taken by the writer (Figs. 2 and 3). The method, which is also applicable to dogs, could be used to prevent the fraudulent substitution of one animal for another.

Another interesting development of methods of identification has been the reconstruction of the face upon an unknown skull. Accurate measurements of the depth of the flesh upon specified portions of the skull have been made and classified

according to the race and sex of the person. By applying the appropriate average values thus recorded, it has been found possible to reconstruct a face in plastic material upon the skull, with a close approximation to the appearance of the original face. The method was tested experimentally some years ago in Berlin, a cast being taken

from the skull of a criminal whose features were unknown to the sculptor, and a reconstruction of the face, in accordance with the average measurements, closely resembled the original face. The method was first applied to criminal investigation in New York. The skeleton of an unknown man was found in a cellar, and the face was reconstructed upon it in plasticine by the experts of the New York police, and was then recognised by his friends as that of an Italian workman, Dominick la Rosa. A photograph of this reconstruction is reproduced by permission of Mr. B. Wentworth (Fig. 1).

The scientific methods of examination in criminal cases may include the microscopical and chemical examination of all kinds of objects that may be put forward as "exhibits." Much can often be learned from an examination of documents, apart from the question of handwriting. The composition of the paper itself and the nature of the pigments in the writing upon it may often be conclusive. For instance, inks differ both in microscopical appearance and chemical reactions. In the trial of Brinkley for murder the question of the inks upon a will alleged to be a forgery was raised, and it was proved to the Court that there were three different inks upon the document.

The age of an ink may sometimes be approximately judged by means of chemical tests, since after a few years an ink upon paper alters in its composition, and will no longer react readily with reagents. Evidence to this effect was given in the trial of Colonel Pilcher, who was found guilty of forging his cousin's will. It is also possible, if the lines in ink intersect, to ascertain which is uppermost and therefore the more recently written. This was conclusive in the case of *Rex v. Cohen*, in which an entry in a doctor's day-book was shown thus to be in its proper order in a series, and not a later interpolation, as alleged by the prosecution (Fig. 8). Very old inks (Fig. 12) differ in their appearance under the microscope from modern inks (Fig. 13), the latter showing a sharply marked structural surface and well-defined edges due to the points of the modern pen-nib.

Pencil pigments may also be differentiated microscopically. Prior to 1565 pencils were composed of metallic lead, and the lines made with them had the appearance shown in the illustration (Fig. 10). The blacklead from the Borrowdale mines produced quite different marks (Fig. 11). One type of it, artificially compressed from the blacklead dust, made marks that can be easily distinguished from those produced



FIG. 2.—A MEANS OF PREVENTING FRAUDULENT SUBSTITUTION: THE NOSE-PRINT OF A JERSEY HEIFER (SISTER OF THAT WHOSE NOSE-PRINT APPEARS IN FIG. 3).

Photograph by C. Ainsworth Mitchell.



FIG. 3.—FROM A SISTER OF THE ANIMAL WHOSE NOSE-PRINT APPEARS IN FIG. 2: THE NOSE-PRINT OF A YOUNG JERSEY HEIFER (BOTH REDUCED IN SIZE IN THE PHOTOGRAPHS).

Photograph by C. Ainsworth Mitchell.

between the pores in a known and an unknown print, an additional proof of identity is obtained. This method of *poroscopy* has been developed by Dr. Locard, of the Police Laboratory at Lyons, and has led to the conviction of the criminals in numerous cases of burglary when no other evidence was obtainable. It has the advantage of being applicable to

by modern composite graphite pencils. Type-writing, too, can be readily traced to the machine that produced it. In one case of blackmailing, within the writer's experience, it was proved by the faults in the typed letters that the words "return the amount" had been typed upon the same machine as a letter sent by a suspected person (Fig. 7).

CRIME AND THE CAMERA: SKIN PATTERNS; INK AND PENCIL; TYPE-SCRIPT.

FIGS. 4 AND 5 FROM PHOTOGRAPHS BY PROFESSOR WILDER. FIGS. 6 AND 9, BY MR. B. WENTWORTH. THE REST BY MR. C. AINSWORTH MITCHELL, M.A., F.I.C.

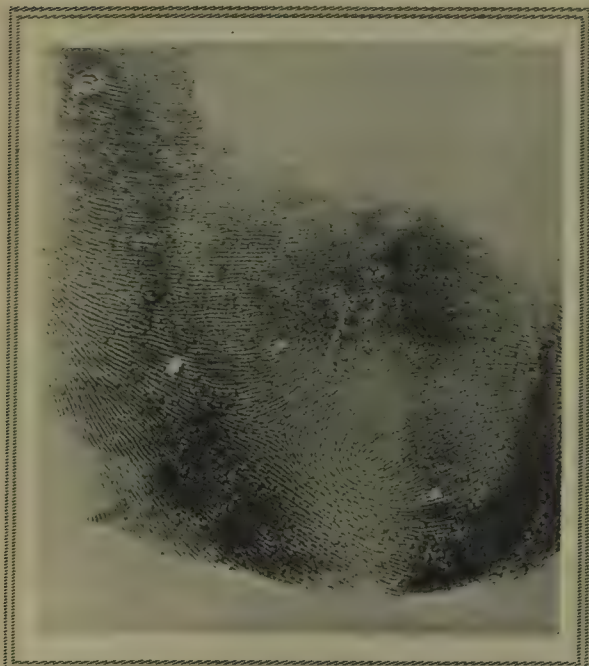


FIG. 4.—A SKIN MARK OF WHICH ONLY SOME TWELVE INSTANCES ARE KNOWN: A LEFT HEEL PRINT, SHOWING THE RARE CALCAR PATTERN.



FIG. 5.—CAUSING ITS POSSESSOR TO BE A MARKED MAN: A RIGHT CALCAR PAD (ON THE OUTER SIDE OF THE FOOT).

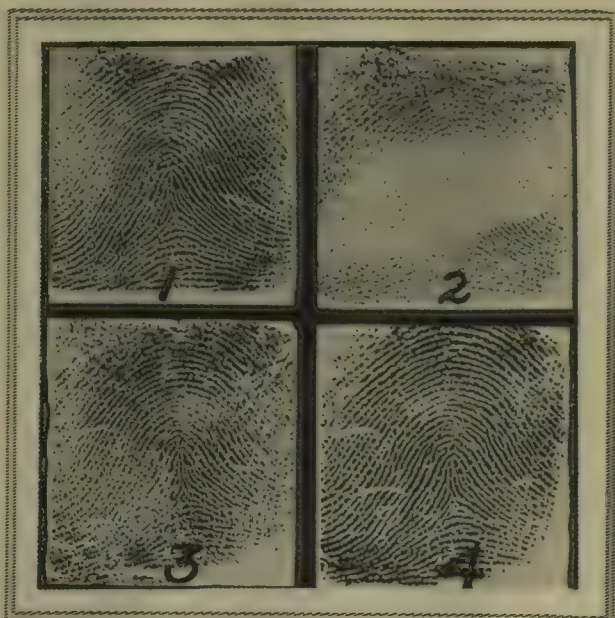


FIG. 6.—PROVING THE PERMANENCE AND IMMUTABILITY OF SKIN PATTERNS: (1) AN ORIGINAL FINGER PRINT; (2) THE SAME PRINT JUST AFTER THE PATTERN WAS DESTROYED BY A BURN; (3) THE SAME PRINT HEALING; (4) HEALED, WITH PATTERN EXACTLY AS BEFORE.

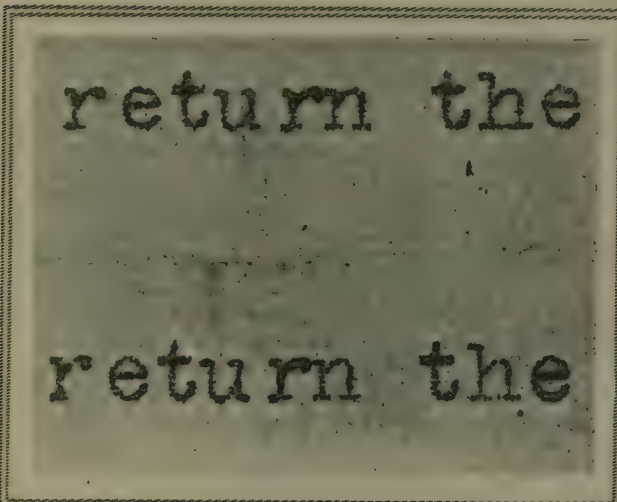


FIG. 7.—HOW A BLACKMAILER WAS BROUGHT TO BOOK: ENLARGEMENTS OF TWO PIECES OF TYPE-SCRIPT, IN WHICH THE SAME MECHANICAL FAULT PROVED IDENTITY.

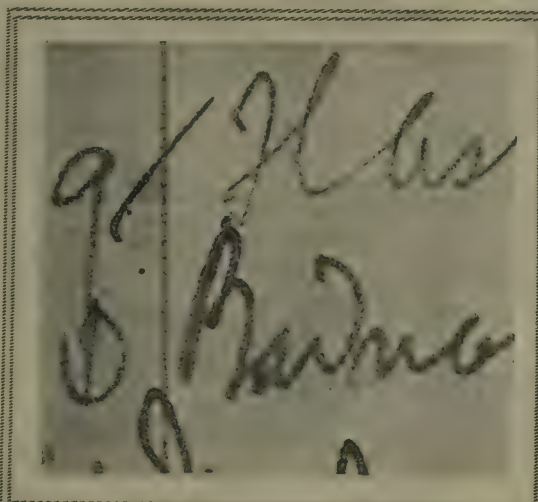


FIG. 8.—CHEMICAL INK-TESTS THAT SAVED A DOCTOR 6 MONTHS AND £100 FINE: TWO ENTRIES IN HIS REGISTER PROVED IN CORRECT SEQUENCE.



FIG. 9.—A METHOD USED TO CONVICT MANY FRENCH BURGLARS: PORES ON SKIN RIDGES IN A FINGER-PRINT (ENLARGED).



FIG. 10.—UNLIKE FIG. 11: A 16TH CENT. METALLIC LEAD PENCIL MARK (ENLARGED).



FIG. 11.—BORROWDALE GRAPHITE: AN 1843 PENCIL MARK (ENLARGED).

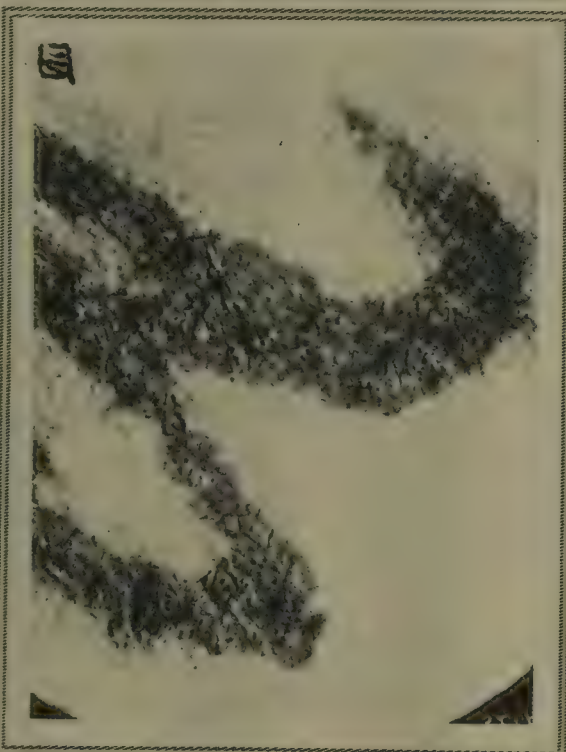


FIG. 12.—UNLIKE MODERN INK (FIG. 13): AN EIGHTEENTH-CENTURY INK MARK—A BLURRED EFFECT (ENLARGED).



FIG. 13.—CRYSTALLINE, WITH DARK EDGES DUE TO A MODERN NIB: A MODERN IRON GALL (BLUE BLACK) INK MARK (ENLARGED).

The achievements of Sherlock Holmes in the use of the microscope and other scientific tests for the detection of criminals, fascinating as they are, may be fairly said to have been eclipsed by the actual methods used to-day by the police in various countries, as described in the article given on the opposite page. The author, Mr. C. Ainsworth Mitchell, is the editor of the "Analyst," the journal of the Society of Public Analysts and other Analytical Chemists. The various processes that he describes, the results of which are brought out by means of photographic enlargement for purposes of evidence, are shown in our illustrations, whose reference numbers correspond to allusions in the article. Most

interesting of all, perhaps, is the method of reconstructing a face (as shown in Fig. 1) from a skull, according to the ascertained average dep'h of flesh on its different parts. Chemical tests of ink, in the case of Rex v. Cohen, caused the quashing of a sentence of six months' imprisonment and a fine of £100, passed on a doctor alleged to have interpolated an entry in his register. The tests showed that the second entry was partly superposed on the first, and therefore in correct sequence. On another page we illustrate a subject of kindred interest, the identification of bullets and weapons from the character of marks on a bullet or body, the shape and size of the cartridge, and composition of the explosive charge.



THE WORLD OF SCIENCE.



A PERSONAL TRIBUTE.

By W. P. Pyecraft, F.Z.S., Author of "The Infancy of Animals," "The Courtship of Animals," etc., etc.

In the memoir of the late Sir William Ingram, published in "The Illustrated London News" of Jan. 3, allusion was made to his love of birds and the work he did in the collection and preservation of rare species. Readers of this page will no doubt be glad of some fuller information about this side of his career.—W.P.P.

IN the first place, I would fain testify to the fact that Sir William's interests in natural history did not stop at ornithology; they were spread over a much wider field. This was doubtless known to the writer of the tribute to his memory above referred to, but in the limited space at his disposal it was obviously impossible to touch upon this aspect of his activities. It was, however, from this side that I knew him best. During a friendship which extended over long years, he always showed the most infectious enthusiasm when discussing the latest discoveries relating to animal life.

That that enthusiasm was deeply rooted was shown by the fact that when, some years ago, he was told at the British Museum of Natural History—at which he was a frequent visitor, till his health failed him—that money was needed for exploration work in New Guinea and Australia, he at once undertook to pay the cost of a trained collector there. The idea instantly captivated him; he seemed to visualise its possibilities, and his vision was justified. For, among the spoils which came to the Museum were a number of species new to science, while many others were represented in the Museum collections only by single specimens, very old, and lacking proper date—a matter of supreme importance where scientific accuracy is concerned.

Two of the new species were named after him. One of these was a kangaroo (*Macropus ulabatus Ingrami*), which is now one of the type specimens of the Museum. The other was one of the tiny creatures known as "Pouched-mice" (*Phascogale Ingrami*). Even the Colonists know little of these "mice." Most of us, probably, have never even heard of them, and it might be supposed that they were of no very great interest. This, however, is far indeed from being the case. Slender and graceful little animals, they are designated "mice" by the Colonists for want of a more expressive term; but they have, of course, nothing whatever to do with mice, being in reality tiny "marsupials," ranging over the whole of Australia, as well as New Guinea and the adjacent islands. The "pouch," so conspicuous in the kangaroos, is in most species but feebly developed—but it is there all the same. For the most part they are uni-coloured, but in one or two species there is a dark stripe running down the back, all that is left of a once striped pelage. They seem, in the Australian region, to occupy the place held in India and the adjacent countries by the curious tree-shrews, and in South America by the smaller kinds of opossum.

Another Pouched-mouse in this collection, new to science, belongs to the genus *Sminthopsis*. It is of special interest because in the matter of its habitat it differs strikingly from the members of the genus *Phascogale*, since these last are strictly arboreal, while the others are terrestrial, representing ordinary shrews. As a contribution to systematic zoology this collection was a notable one, to Sir William's great delight; but it would take too long to enumerate all the new genera and species which it proved to contain when it came to be worked out. And this was by no means the only service of this kind

which he rendered to the Museum, where he has left an enduring memory.

Limited as I am, as to space, on this page, I can do no more now than refer briefly to his ornithological work. He was very earnest about this, and was especially fond of live birds, of which he kept many. I have a lively recollection of a tame sparrow which was the special pet of Lady Ingram. Never before, or since, have I seen such tameness in a sparrow! Needless to say, it was not caged. But of all birds, I think, the Birds of Paradise appealed to him most: their extraordinary contrasts in their forms of

Tobago and stocked it with a number of the Greater Bird of Paradise, lest they should become exterminated in their native home by the plume-hunters. But, more than this, we owe to him an extraordinarily vivid and detailed account of the courtship display of the fine King Bird of Paradise which lived in a great conservatory attached to his beautiful house at Westgate-on-Sea, where I had the good fortune to sit with him and watch its sprightly movements, though I never had the luck to see more than one phase of the amazing antics which this feathered acrobat performed when the spirit moved him. Sir William fortunately placed his observations on

record in the *Ibis*, the journal of the British Ornithological Society, of which he was a member.

As a contribution to the Theory of Sexual Selection this was an extremely valuable piece of work. His description is too long to be given here, in its entirety, but I cannot resist the desire to afford my readers an opportunity of enjoying an abridged version of this strange performance, which he was the first to witness and put on record.

"He always commences his display," Sir William remarks, "by giving forth several short, separate notes and squeaks, sometimes resembling the call of a quail, sometimes the whine of a pet dog. Next he spreads out his

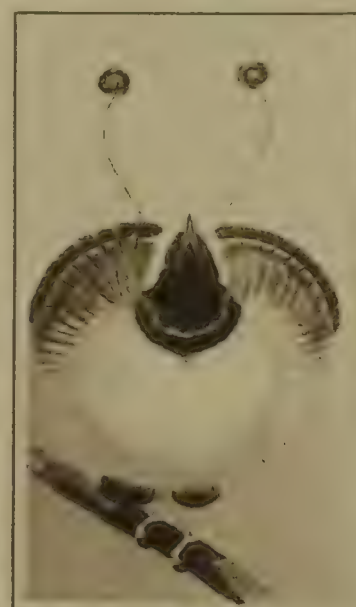


"HE SPREADS OUT HIS WINGS, OCCASIONALLY QUITE HIDING HIS HEAD": THE FIRST STAGE OF THE DISPLAY OF THE KING BIRD OF PARADISE.

The left-hand photograph shows "the first stage of the display, where the bird's head is almost hidden. A pair of tail covert feathers have become transformed to look like a pair of long wires, terminating in a feathery disc, of a wonderful dark metallic green."—The centre photograph shows the bird "nearing the full display. The postures here illustrated were selected by Sir William as most typical, and were drawn from the living bird by Mr. G. E. Lodge."—The right-hand photograph shows "the full display, the beauty of which is lost here by the absence of colour. The head and throat are scarlet, a metallic green band bounds the scarlet throat, and tips the rim of the circular screen of flank feathers. The beak is yellow, and the legs blue."



THE "JUGGLING" PHASE: A KING BIRD OF PARADISE NEARING THE CLIMAX OF HIS DISPLAY, SWAYING THE BALL-LIKE TIPS OF THE TAIL-WIRES.



"THE FLUFFY WHITE FEATHERS UNDER THE TAIL BRISTLING IN HIS EXCITEMENT": THE FINALE OF THE DISPLAY OF THE KING BIRD OF PARADISE.

ornamentation, and the indescribable beauty of their coloration, fascinated him.

It has already been told of him that he organised and financed an expedition to New Guinea to procure living specimens of the gorgeous Blue Bird of Paradise, and that he purchased the island of Little



FOR COMPARISON WITH THAT OF THE KING BIRD OF PARADISE SHOWN ABOVE: THE COURTSHIP DISPLAY OF THE LESSER BIRD OF PARADISE.

"The courtship display of the Lesser Bird of Paradise is here shown to serve as a contrast with that of the King Bird of Paradise. The long flank feathers are upraised immediately behind the wings, which are spread open."

wings, occasionally quite hiding his head; at times stretched upright, he flaps them, as if he intended to take sudden flight, and then, with a sudden movement, gives himself a half turn, so that he faces the spectators, puffing out his silky white lower feathers. Now he bursts into his beautiful melodious warbling, so enchanting to hear, so difficult to describe. Some weeks ago . . . listening to the song of a sky-lark . . . I exclaimed, 'That is the love-chant of my King-bird.' He sings with a low, bubbling note, displaying all the while the beautiful fan-like side-plumes, which he opens and closes in time with the variations of his song. These fan-plumes can only be expanded when the wings are closed, and during this part of the display he closes his wings, and spreads out his short tail, pressing it close over his back, so as to throw the long tail-wires over his head, while he gently swings his body from side to side. The spiral tips of the wires look like small balls of burnished green metal, and the swaying movement gives them the effect of being slowly tossed from one side to the other, so that I have named this part of the display the 'Juggling.' . . . Then comes the *finale*, which lasts only for a few seconds. He suddenly turns right round and shows his back, the fluffy white feathers under the tail bristling in his excitement; he bends down on the perch in the attitude of a fighting-cock, his widely opened bill showing distinctly the extraordinary light apple-green colour of the gullet, and sings the same gurgling notes without once closing the bill, and with a slow, dying-away movement of his tail and body. A single drawn-out note is then uttered, the tail-wires are lowered, and the dance and song are over."

Two other forms of display he describes, but they were rarely given, and are too long to be quoted at length, nor can they be summarised without spoiling them.

Here, then, must end my humble tribute to one whom I was privileged to call my friend, and he was sometimes my counsellor. Whatever he undertook, he put into it the whole of his forceful personality, and hence it is that he has left a revered and inspiring memory behind him.

SCIENCE AND MURDER CASES: IDENTIFYING WEAPON AND BULLET.

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, FROM MATERIAL SUPPLIED BY MR. HUGH B. C. POLLARD, F.R.M.S., WHOSE ARTICLE APPEARS BELOW.



Continued.]

was fired from six feet away, and not in close conflict. In the case of a suspected suicide which is really a murder, he will be able to prove that the weapon was held at such a distance that a self-inflicted wound was impossible. The bullet remains in the corpse or in the room. It is in itself evidence of the type of weapon used, its calibre, and even its make. The bullet bears the marks of the rifling, which help to determine the make of weapon. The evidence yielded by the bullet is not always alone sufficient, but if a fired cartridge-case is also available, the matter is simplified. Every fired cartridge-case bears on it certain special marks or characteristics which can be produced only by the particular pistol in which the cartridge was fired. If a suspected pistol is found in possession of the accused, cartridges fired in this will have identical marks with those found on the scene of the crime if this pistol was used. A similar pistol of the same make and calibre will

produce different marks on the cartridges. It is the cartridge rather than the bullet that determines the identity of the weapon. In the recent trial of the Abbé Delorme, of Montreal, the evidence for the prosecution was based on the supposed identity of bullets said to be from the body of the murdered man—the Abbé's brother, Raoul Delorme—with those from a pistol belonging to the Abbé. Scientific evidence given in Canada, on lines of investigation and research advised from London, succeeded in proving the innocence of the accused and securing his acquittal at the third trial held. The scientific small-arms expert can use chemical analysis to prove the identity or dissimilarity of the metal alloys in the bullet found in the body and those found in the possession of the accused. Given adequate clues—and the murderer almost inevitably leaves them, we can now say: 'The crime was committed with that particular pistol and no other.'—[Drawing Copyrighted in the United States and Canada.]

THE IMPERTURBABLE MOOR: VILLAGERS IGNORE SPANISH BOMBING AT THE HOUR OF MUEZZIN.

DRAWN BY A SPECIAL REPRESENTATIVE WHO RECENTLY VISITED THE RIFFIAN MOORS.



"SUDDENLY OVERHEAD THERE IS A FAMILIAR SOUND—A LONG-DRAWN SHRIEK; THEN A MUFTI CONTINUING TO LEAD PRAYERS DURING A SPANISH BOMBARDMENT

This dramatic drawing was made near El Arba, a Spanish post on the Tetuan road recently abandoned by the Spanish troops. In a note that accompanies his work, the artist writes: "It is the hour of Muezzin, and the Mufti leads the men of the village in prayer. Suddenly overhead there is a familiar sound—a long-drawn shriek; then a white puff of smoke among the houses of a village on the opposite hillside, perhaps a mile away. Then follows another shriek in the air, and another puff of smoke. From the direction of El Arba, behind the hill, comes the sound of gunfire. It is the evening hate. Again and again the Mufti reiterates his melodious invocation to Allah." The Spanish campaign in Morocco was further complicated recently

WHITE PUFF OF SMOKE AMONG THE HOUSES OF A VILLAGE ON THE OPPOSITE HILLSIDE": IN MOROCCO—A DRAWING BY AN ARTIST RECENTLY WITH THE RIFFS.

by the revolt of the Anjera tribes, who inhabit country behind the new Spanish lines, in the triangle between Tetuan, Ceuta, and Tangier. During operations against these new rebels, it was reported on January 4: "The Sok el Jemis market was surprised by Spanish airmen, who dropped bombs which caused many casualties among the Moors and cattle." Later it was stated that the Spanish plan was, not to subdue the Anjera by force of arms, but to isolate them. Meanwhile, their position enables them to threaten the rear of the new "Primo de Rivera" line, to which the Spanish forces opposed to the Riffian Moors recently fell back.—(Drawing Copyrighted in the United States and Canada.)

DIGGING FOR DINOSAURS IN TANGANYIKA.

By L. S. B. LEAKEY, CHIEF ASSISTANT OF THE BRITISH MUSEUM EAST AFRICA EXPEDITION.

FOR five years before the war a party of German scientists from the Berlin Museum were at work on the fossil beds found at Tendaguru, near Lindi, in German East Africa. During that time they unearthed and removed to Berlin Museum many thousands of bones of prehistoric reptiles, both big and small, amongst which was included an almost complete skeleton as well as some of the biggest individual bones ever found.

After the war, when German East Africa was handed to Great Britain and became known as Tanganyika Territory, the British Museum authorities decided that steps should be taken to secure specimens from this remarkable bed for the national collection. In 1924 it was decided to send an expedition under the leadership of Mr. W. E. Cutler, of Manitoba University, who is recognised as one of the foremost palaeontological collectors of the day. The present writer was born in Kenya, East Africa, and, owing to possessing considerable knowledge of the country and of native dialects, had the good fortune to be selected as Mr. Cutler's chief assistant.

On April 16, with a party of native porters and a guide, I set out from Lindi to locate the proposed site for camp. After four strenuous days of "safari," trying to follow the ten-year-old German trail through elephant grass anything from six to twelve feet high, thorn-bush, scrub, and patches of bamboo, with here and there a small native village, we reached the hillock on which the last German camp had been pitched.

That night the Jembe, or local Government Headman, beat his drums summoning workers from the widely scattered villages of his sub-district, and the next six or seven weeks saw a daily crowd of natives engaged in clearing away grass and bush, cutting and carrying building material, putting up buildings of all kinds, and cutting an eight-foot trail all the fifty-six miles to Lindi. Rest-camps, too, were built near one or two villages on the way up.

On May 24 Mr. Cutler arrived, and bone-digging soon commenced in earnest. The method of procedure for the opening up of a bone site was roughly as follows: When Mr. Cutler had selected a site, a gang of natives would be taken out armed with billhooks, picks, mattocks, shovels, and "karai" (large iron basins which, filled with earth and carried on the head, are the African substitute for wheelbarrows).

The whole area selected was cleared of vegetation with billhooks, and the pick and mattock men were set to work to dig a long trench diagonally or zigzag, so as to find the "bone level" as soon as possible. Sometimes this meant digging only a foot or two, and sometimes as much as eight feet. Meanwhile, the shovellers were filling "karai" and a gang of men were carrying earth and rock to a dump. When the "bone level" was found, the diggers opened up the whole area to the same level.

Now men specially selected for carefulness were put on with small picks, awls, brushes, and knives, and all bones found were partly exposed and cleaned. As each bone was thus prepared, Mr. Cutler examined it to decide whether it was worth taking at all, and, if so, whether as a plaster specimen or a parcel, according to condition and size.

The making and labelling of parcels was my special work, and consisted of carefully wrapping up, first in some soft paper and then in brown paper, all small hard bones, such as those of the tail and feet, and also of all loose pieces off the bones to be plastered.

Each parcel had to be marked with the index number of the particular ditch, and its position relative to other bones and other such data, with the

utmost care, as a mistake might easily make the parcel valueless.

Plastering was never done by anyone but Mr. Cutler himself, as several years' practical experience are needed to make a successful plasterer. The main requirements for bone-plastering are plaster-of-Paris, hessian or sacking, tissue-paper, water, and shellac, together with a few tools and brushes.

First the bone to be plastered is pinnacled—that is, the rock or clay on all sides is cut away, leaving the specimen resting on a pinnacle as shown in the

being taken not to wrench the "jacket." All excessive clay or rock is removed from the underside to reduce the weight as much as possible, and the plastering process is repeated so that the whole bone is "jacketed."

In the case of big bones which, owing to size and weight, cannot be taken up in one piece, the jacket is put on in sections, leaving a gap of about a quarter of an inch between sections, and then, when the bone is undercut, a clean break is effected at each end of a section and each piece is plastered separately, only to be cemented together again when it reaches the Museum.

Once the plaster specimens are dry, they, and the parcels belonging to or near them, are all carried up on litters to the bone-store, and there put on shelves until such time as they can be packed and shipped.

To give an idea of the weight, it should be realised that one big limb bone will take as many as eight men to carry it home to camp—four men to each section.

Up to the end of November there were enough bones ready to fill thirty cases, and an equally large number exposed and half-prepared still in the ditches.

Three not infrequent questions asked are: What happens to the plastered bones when they reach the Museum? Have you got a complete skeleton yet? How long will the expedition stay out?

The answer to the first question is that the processes described are merely to ensure safety in transport, and that on arrival at the Museum all the material passes into the hands of preparators, whose

work it is to remove the plaster jackets and remaining clay and rock, take to pieces, thoroughly clean and cement up the broken bones, and then, if there are enough bones to set up as a skeleton or partial skeleton, to do so; and, if not, to prepare them as single-bone exhibits. Often, too, parts of a bone are missing, and these have to be remodelled from other similar bones.

The answer to the second question (whether a complete skeleton has been found) is, "No—not yet." Complete skeletons, or even nearly complete skeletons, of the larger prehistoric reptiles at any rate, are very rare in most beds, for it is only under certain very special conditions that the bones of any wild creature can lie so undisturbed as to be found many millions of years later still all together. They would need to have been silted over almost as soon as death occurred, as otherwise the flesh-eating animals of the day would be sure to drag away and possibly even completely demolish some of the bones. Another condition would be that the creature must have died in a spot where floods, streams, and tides would not scatter its bones. This does not mean that a complete skeleton may not be found in the course of the next season or two, for the Germans did find at least one almost complete skeleton; but such a find cannot be counted upon.

The answer to the question; "How long?" is, "As long as funds permit." At present, money for expedition purposes is very short, and the British Museum authorities are quite unable to maintain expeditions as long as they would like to.

There is material enough to be worked on to keep the expedition out five or six years if only funds were available, but unless the public takes more interest, and gives more financial support to its national museum, it will be quite impossible to do so, and, as is not uncommon nowadays, we shall see foreign countries acquiring all the best specimens for their own museums, even though the very best specimens are to be found in our own territories.



CUT THROUGH THE BUSH FOR 56 MILES BY NATIVE LABOUR: AN 8-FOOT TRAIL FROM TENDAGURU (THE SITE OF THE FOSSIL BEDS) TO LINDI, ON THE COAST, MADE FOR PURPOSES OF TRANSPORT.

illustration. The top sides and ends are then partly cleaned with awls and brushes, and a thin solution of shellac freely applied to all parts which are at all "brash," or crumbling. The whole bone is then splashed with water, and the tissue-paper—torn into smallish pieces—is slapped on with a brush and water, covering all the exposed bone surfaces. This is essential so as to prevent the plaster from adhering to the bone.

Next, hessian strips, previously cut into lengths about eight inches by two inches and slightly dampened, are dipped into the plaster-of-Paris mixed to a thin cream consistency, and are then slapped on to the



THE ONLY METHOD OF TRANSPORT AT PRESENT AVAILABLE FOR CONVEYING THE BONES FOUND TO PORT FOR SHIPMENT: NATIVE PORTERS CARRYING BOXES—A SYSTEM IT IS HOPED TO CHANGE THIS YEAR FOR A MOTOR-LORRY.

Photographs Supplied by Mr. L. S. B. Leakey.

bone in such a way that each strip just overlaps the previous one; the whole bone is thus covered with two or three coats, according to the strength required to hold it together.

When the whole has thoroughly set and dried, the bone is undercut—i.e., the pinnacle is gradually cut away and the bone carefully toppled over, care

GIGANTIC DINOSAUR BONES IN "BRITISH EAST": WORK IN TENDAGURU.

PHOTOGRAPHS SUPPLIED BY MR. L. S. B. LEAKEY CHIEF ASSISTANT TO THE BRITISH MUSEUM EAST AFRICA EXPEDITION.



WITH A NATIVE "SPECIALLY SELECTED FOR CAREFULNESS" AT WORK ON IT: A PARTLY CLEANED BONE PATCH AT TENDAGURU.



THE CHIEF SITTING BESIDE A BIG BONE: MR. W. E. CUTLER, OF THE UNIVERSITY OF MANITOBA, LEADER OF THE EXPEDITION.



REQUIRING EIGHT MEN TO CARRY IT (FOUR TO EACH SECTION): A LARGE DINOSAUR SACRUM, PLASTERED, BEING CONVEYED ON A LITTER TO THE BONE STORE.



WAITING TO BE PARCELLED (AS DISTINCT FROM THE PLASTERING METHOD OF PACKING THE LARGEST SPECIMENS): A COLLECTION OF DINOSAUR CAUDAL, CARPAL, AND TORSAL BONES.



A PRELIMINARY TO THE PLASTERING PROCESS: DINOSAUR BONES AT TENDAGURU "PINNACLED" (AS DESCRIBED IN THE ARTICLE ON THE OPPOSITE PAGE) AND COVERED UP.



SHOWING THE DEPTH OF A TYPICAL TRENCH OR "DITCH": A NATIVE LEANING OVER THE TOP; AND BONES, INCLUDING A DINOSAUR HUMERUS.



"THE AREA WAS CLEARED OF VEGETATION WITH BILLHOOKS, AND THE PICK AND MATTOCK MEN SET TO WORK TO DIG": A BIG BONE EXCAVATION.



SHOWING SOME WEATHER-EXPOSED BONES ON THE GROUND: A NATIVE WORKER ON A SITE CHOSEN FOR A NEW DITCH.



ONE OF THE BIGGEST DINOSAUR FOSSILS FOUND AT TENDAGURU: A HUGE BONE PARTLY CLEANED—SHOWING THE TOOLS USED (PICKS, AWLS, AND BRUSHES), AND WATER PAILS CONTAINING BOTTLES OF SHELLAC COOLING.



MORE THAN THE AVERAGE HEIGHT OF A MAN: THE SHOULDER-BLADE OF A GIGANTIC DINOSAUR FOUND AT TENDAGURU, MEASURING SIX FEET TWO INCHES.

Some 600 fossil bones of dinosaurs and other animals have so far been found at Tendaguru, in Tanganyika, by the British Museum Expedition, described by Mr. L. S. B. Leakey in his article opposite. They include the shoulder-blade shown above, measuring 74 in., a femur of 65 in., humeri of 63 in., and a tibia of 54 in. It will be of great interest to correlate them with similar remains found in Wyoming, U.S.A. The expedition's camp is situated in a wild region, fifty-six miles from Lindi, on the coast, to which a track was cut through the bush after Mr. Leakey had reached the site. It is a region of deep ravines, and thickly covered with tall elephant grass. Lions, leopards, and elephants roam

at large, and there are innumerable snakes. One night Mr. Leakey's pet monkey fell a victim to a leopard, and he himself has had narrow escapes from snake-bite. The main object of the expedition is to obtain bones of *Gigantosaurus*, a huge dinosaurian reptile believed to have been about twice the size of the great *Diplodocus* whose skeleton—over 80 ft. long—is in the Natural History Museum. The humerus of *Diplodocus* measures about 3 ft. 6 in., while that of *Gigantosaurus* is over 7 ft. A reconstruction drawing of the latter monster as it probably appeared in life in the remote past, millions of years ago, is given on a double-page in this number.

St. Paul's—and Grouting: Monolith-Making and the Dome

"SIXTY-THREE YEARS OF ENGINEERING." By SIR FRANCIS FOX.*

AS all the world knows by now, "the Owner or Occupier of the Structure being St. Paul's Cathedral, and situate in the City of London" has been required "forthwith to take down the eight piers supporting the dome and replace with piers of solid ashlar masonry"; and be it remarked that when the Dome was plumbed in 1913 the "bob" showed a 5½ in. divergence from the centre.

Whether this order will be obeyed to the letter remains to be seen, for there are two schools of thought amongst those skilled in the preservation of ancient buildings. The Commission of experts appointed in 1921 reported in June of the following year, and on Dec. 29 of last year, when they noted: "Your Commission have . . . discussed the alternative of reconstructing the piers entirely, and, while they do not doubt the possibility of doing this, though it might involve the taking down of the dome and its supports, yet in view of the enormous cost and the necessity of closing the greater part of the Cathedral for several years—to say nothing of the great risk of disturbance involved—your Commission are convinced that the wiser course would be to grout up and to repair the piers in the first instance . . . leaving it to a later generation to undertake the larger operation should it at any time become absolutely necessary."

That is well; but Sir Francis Fox, one of those who advised as far back as 1913, would go much further—down to the very foundations—and at once. His order of procedure, as given in his "Sixty-Three Years of Engineering," would be: "No. 1. To shore and timber up the walls, and to centre the arches, in order to relieve them of as much weight as possible, and also to prevent any broken pieces of stone from falling. No. 2. To wash out with water and grout up with cement the masonry or brickwork, rendering the whole mass monolithic, so that any operations on the foundations may be as free from risk as possible. No. 3. To replace broken masonry and to insert the necessary bond-stones. No. 4. When all this has been done steps may be taken to strengthen the foundations." To which he adds: "It is evident that to alter this sequence in any way is to court disaster. Not a stone should be moved nor cut open, even to remove the old rusty iron ties, until all grouting is done."

Let us consider grouting. Sir Francis, its most eloquent advocate, has had unrivalled experience of it. "When a wall cracks," he writes, "the ordinary remedy is to send for a builder or a mason, and employ him to point up the injury, which he does with mortar and trowel. . . . But it should be borne in mind that this pointing goes in for only an inch in depth, and that the injury to the wall is in no degree remedied: the crack, for its entire length, remains a crack, and its tendency to widen is by no means lessened. . . . The Romans were probably aware of the value of 'grouting up' their work, but they had not the necessary appliance for doing it effectually; nor had we until within the last forty years, when the late Mr. James Greathead [who first conceived the idea of deep-level cast-iron tubes through which trains might be run beneath London] invented the grouting machine for use in the construction of deep tunnels or electric tube railways of London."

The "grout," a mixture of cement, sand, and water, and of the consistency of cream, is blown into the cracks by means of compressed air—on engineering work with as high a pressure as 4000 lb. to the square inch; in the case of cathedrals, towers, churches, and the like with a pressure not exceeding 60 to 100 lb. per square inch. By such a "cementation process," rubbish-cored pillars, for example, may be made solid. That, in particular, is where it would come in in the case of St. Paul's, for the piers carrying the dome are by no means what they seem. Sir Francis says of them: "The weight of the dome at the bottom

of the footings has been estimated at 60,000 tons, or about 7400 tons on each pier. Now the masonry of these piers . . . seems at first sight to be of excellent Portland stone . . . but the enquiry brought out the startling fact that this fine masonry is only a thin veneer, in some places not more than 4 to 6 in. thick, and that the interior is filled with badly executed rough rubble.

"The piers at crypt level are approximately 43 ft. in length by 20 ft. in width, with an average

subsidence varying from 2 to 6½ in." That, possibly, provides one of the reasons for Wren's prophecy that the building—whose first stone was laid on June 21, 1675, and whose completion was in 1710—would last for two hundred years!

Doubtless the architect would have been still more pessimistic could he have foretold the effects of vibration that is "even greater underneath the foundations than it is upon the surface"; foreseen the havoc caused by the sinking of a shaft at the

foot of the steps of the South Transept, in 1831, in connection with a proposed deep sewer; or anticipated that act of which Sir Francis Fox says: "During the redecoration of St. Paul's a few years ago, large panels, some inches in depth, were cut in the great arches carrying the Dome in order to give shadow. These arches were already overloaded, and the removal of the stone for the panels increased the load on the remainder of the masonry. It was noticed that there was a metallic ring each time a blow from the mason's hammer was struck, and the fragments flew off in all directions as from a gun. This proved that the stones were under heavy pressure. In my opinion it was most undesirable and dangerous thus to reduce the strength of these arches."

Doubtless, he knew, too, that he had built his house upon the sand and not upon a rock.

The depth of the foundations is, in fact, very shallow—4 ft. 6 in. below the floor of the crypt and 12 ft. below the churchyard. For that reason Sir Francis urges that the cathedral should be carried down

into the elastic, chocolate-like, impervious-to-water, Blue London Clay, "an ideal formation," by the way, "in which to construct tunnels." At present it is over a quicksand. This Sir Francis demonstrated to the doubters, and at the same time made a most significant experiment.

"I received permission," he chronicles, "to sink an artesian well in the Crypt, and by means of an electric light lowered down the well, we not only proved the existence of water, but could actually see it flowing in the direction of the Thames."

"The next thing to do was to find out whether by means of grouting, the beds of gravel, clay, and quicksand could be made solid without underpinning. Permission was obtained from the authorities to try the experiment of grouting the subsoil on the vacant area near the Cathedral, formerly occupied by the Post Office, at the west end of Cheapside. Some tubes known as Abyssinian wells were driven down to the clay, and a powerful machine was employed for forcing in cement. A pressure of 400 lb. to the square inch was used, and inch by inch the tube was drawn up, thus exposing the layers of sand and the gravel to the injection of the cement."

"We obtained very satisfactory results on the Post Office site. The gravel was formed into solid conglomerate, the beds of clay were permeated by bands of cement, and even the quicksand in the vicinity of the tube was formed into a fairly hard sandstone. If further experiments and tests yield similar results, it would seem that St. Paul's Cathedral can be safely founded on the London Blue Clay without the expense and risk of actual excavation."

May it be so!

There we must leave the subject, certain that those interested will read at length in Sir Francis's engrossing book, and pointing out to them that, as the title tells, the subjects dealt with in the volume are many and varied: St. Paul's is less than a tithe of the whole. The author has had a very full life, the life of a pioneer. He covers many historic achievements—notably the first submarine, which he saw alongside the *Great Eastern*; the building of the Mersey and the Simplon tunnels; the construction of the Tubes; the bridging of the Victoria Falls; his epoch-making restoration of Winchester Cathedral; and his fruitful labours at Peterborough, Canterbury, Lincoln, and Exeter Cathedrals. And, further, he is most illuminating on the Panama Canal, the fall of the Campanile at Venice, and the Channel Tunnel, with all its possibilities in peace and war.—E. H. G.



USED FOR THE FIRST TIME IN THE SAVING OF AN ANCIENT BUILDING: THE GREATHEAD GROUTING MACHINE AT WORK FORCING GROUT INTO THE ANCIENT WALL AND WATER-TOWER, CHESTER.

thickness of Portland stone veneer of 12 in. We are led to the conclusion that a kind of large rectangular bath was formed into which lime was thrown, and into this lime the stone debris from the former building was dumped anyhow, without any attempt to bed the



PREPARING TO INSERT DELTA METAL RODS AND TO FORCE IN GROUT: DRILLING 14-FT. HOLES INTO THE MASONRY OF THE NORTH-WEST TOWER OF LINCOLN CATHEDRAL.

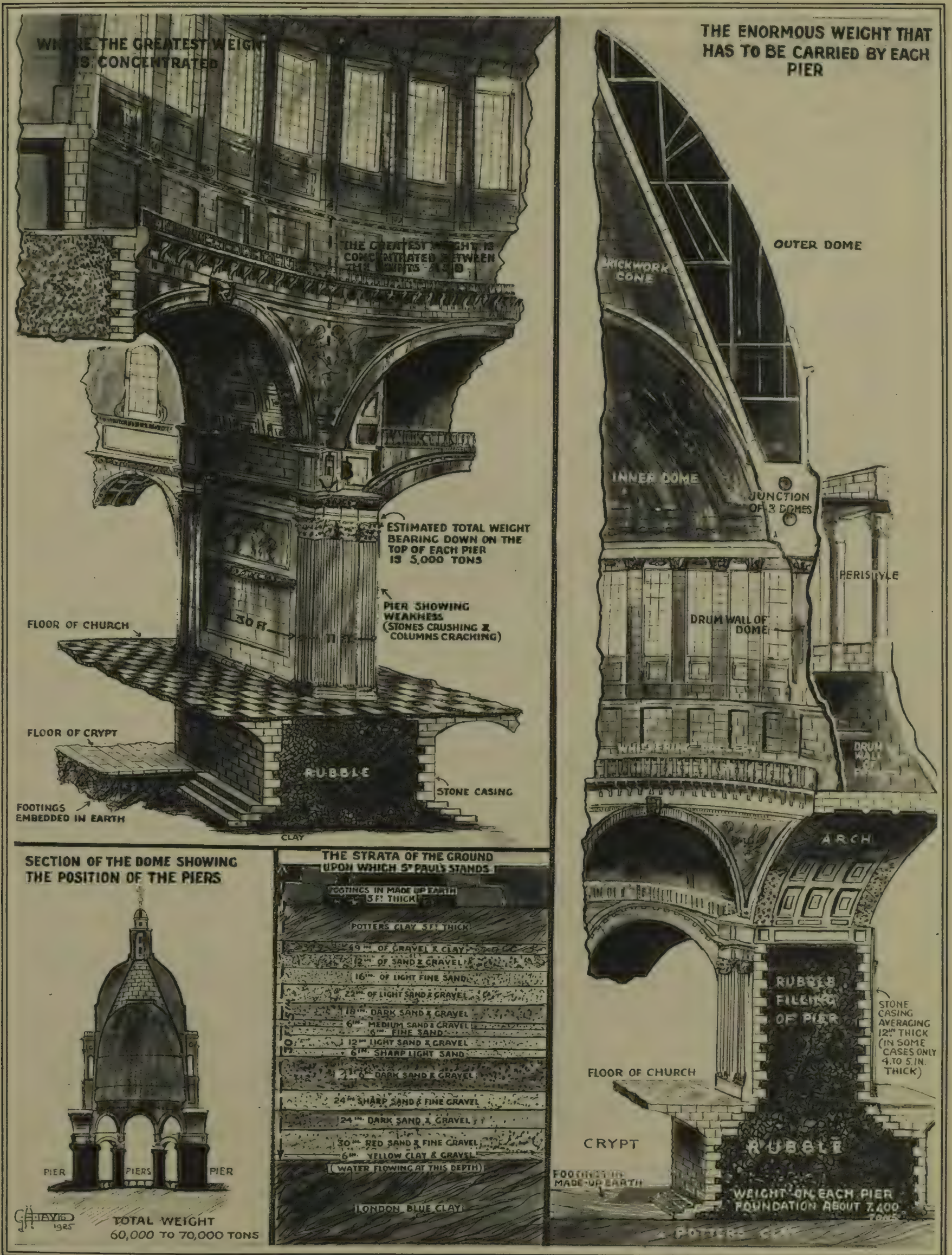
Reproductions from "Sixty-Three Years of Engineering," by Courtesy of the Author, and of the Publisher, Mr. John Murray.

material. Just as a child throws his bricks into the box without arrangement, so did the builders throw the various materials into the framework of the piers. Lumps of Purbeck marble, Caen stone, Bath and sandstone bricks lie there mixed up promiscuously together. Some of them could even be moved between finger and thumb. All the eight piers have at some time or other moved, the degree of

*"Sixty-Three Years of Engineering, Scientific, and Social Work." By Sir Francis Fox, Member of the Institution of Civil Engineers, Hon. Associate of the Royal Institute of British Architects. Illustrated. (John Murray; 18s. net.)

PERILS TO ST. PAUL'S: THE DOME'S WEIGHT; RUBBLE FILLINGS; SAND.

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, FROM OFFICIAL DETAILS SUPPLIED.



SHOWING THE ENORMOUS WEIGHT OF THE DOME BORNE BY THE PIERS; THEIR WEAKNESS FROM RUBBLE FILLINGS; AND THE SANDY STRATA BENEATH THE FOUNDATIONS: ST. PAUL'S IN DIAGRAM.

These diagrams show exactly the nature of the perils that threaten St. Paul's, as described on page 94 in a review of "Sixty-Three Years of Engineering," by Sir Francis Fox, who devotes a chapter to the subject. In 1912, when he was called in to report on the condition of St. Paul's, he said: "The Cathedral is overloaded; it is actually moving and cracking." He believed that an excessive weight was pressing on the foundations, which he found rested on wet sand and gravel. In 1922 anxiety regarding the foundations was relieved by an interim report of the Commission of architects and engineers appointed in the previous

year, who concluded that "there are no signs of recent settlement or movement in these foundations." They reported gravely, however, regarding the settlement of the piers under the weight of the dome, and in their second interim report, issued last month, they recommended grouting (see our double-page). The weakness of the piers is due to the fact that, owing to shortage of stone, they were built with a thin stone casing, the interior being filled with rubble from old St. Paul's. The drawings show where the weight of the dome is concentrated on the piers, while the lettering gives actual weights.—[Drawing Copyrighted in the United States and Canada.]

MAKING ST. PAUL'S SAFE: GROUTING THE RUBBLE-FILLED

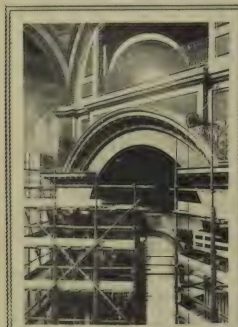
PHOTOGRAPHS BY TOPICAL,



THE FIRST STAGE OF THE "GROUTING" PROCESS: BORING WITH A DRILL TO MAKE HOLES FOR PUMPING LIQUID CEMENT UNDER HIGH PRESSURE INTO THE INTERIOR OF THE PIERS.



SHOWING RESERVOIRS OF CEMENT AND PUMPING MACHINERY (LEFT FORE-GROUND) FORING THE LIQUID THROUGH AN ANGLE-PIPE LEADING TO THE POINT REQUIRED: PRESERVATION WORK IN ST. PAUL'S.



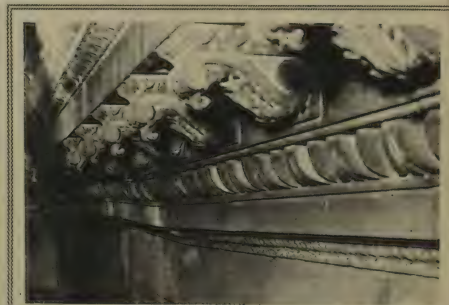
SURROUNDED WITH SCAFFOLDING FOR EXAMINATION PURPOSES AND THE PROTECTION OF THE PUBLIC: A PIER IN ST. PAUL'S.



SHOWING, IN WHITE PATCHES, WHERE FRAGMENTS OF MASONRY HAVE FALLEN AWAY: THE CLERK OF THE WORKS EXAMINING CAPITALS OF THE NORTH TRANSEPT.



DISCOVERING THE EXISTENCE OF FLAWS IN THE MASONRY BY SOUND: TAPPING THE STONEWORK OF AN ARCH OF ONE OF THE PIERS, FROM A SUSPENDED CRADLE.



INDICATIONS OF SUBSIDENCE: STONEWORK DISTINCTLY OUT OF ALIGNMENT OVER THE EAST SIDE OF THE NORTH TRANSEPT.

In 1913 Sir Francis Fox, the famous engineer, reported that the eight great piers supporting the dome of St. Paul's Cathedral had moved and sunk from four to six inches, causing undue cross strains and serious cracks. The Commission of architects and engineers appointed to investigate the matter in 1921 recommended, in their second interim report, that the piers, which had been found to be not of solid stone throughout, but filled with rubble from the ruins of old St. Paul's, should be grouted and repaired rather than reconstructed. Several of the above photographs illustrate the grouting operations that are now being carried out. A full explanation of the process is given by Sir Francis Fox in his new book, "Sixty-Three Years of Engineering," a review of which, with special reference to his chapter on St. Paul's, appears on page 94 of this number. "The grouting machine," he writes, "consists of an iron receiver or reservoir into which, by means of pumps, air can be forced under any pressure up to 100 lb. to the inch. This receiver is connected by a flexible tube to another portion of the apparatus called the 'grouting pan,' which is, in fact, a churn furnished with a handle and spindle to which are attached

PIERS THAT SUPPORT THE IMMENSE WEIGHT OF THE DOME.

C.P.U. AND CENTRAL PRESS.



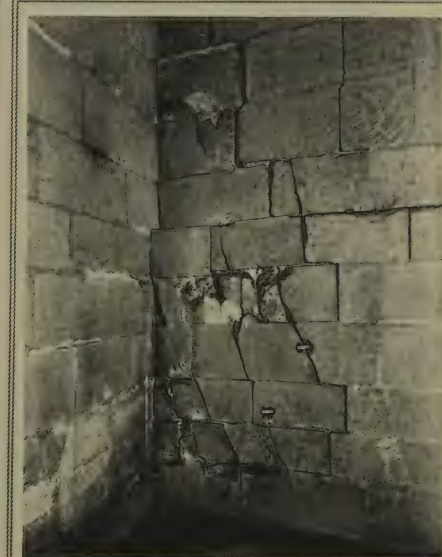
THE ACTUAL GROUTING PROCESS: AN OPERATOR INJECTING LIQUID CEMENT FROM THE FLEXIBLE END OF THE PIPE SHOWN IN THE ADJOINING PHOTOGRAPH (TO LEFT).



ANOTHER SECTION OF MASONRY (IN THE TOP CENTRE) OUT OF ALIGNMENT AS A RESULT OF SUBSIDENCE CAUSING THE WALLS TO "BUCKLE": PART OF THE GALLERY ABOVE THE NORTH TRANSEPT.



ARRANGED IN PLATFORMS FOR THE PURPOSE OF EXAMINING THE PIERS AT VARIOUS HEIGHTS: SCAFFOLDING IN THE INTERIOR OF ST. PAUL'S CATHEDRAL, SHOWING PART OF THE DOME, AND THE WHISPERING GALLERY.



OMINOUS SIGNS OF SUBSIDENCE: CRACKS IN THE BUTTRESSES OF THE DRUM OF THE DOME, WHICH HAVE BEEN FILLED IN—SHOWING PIECES OF GUMMED PAPER ACROSS CRACKS TO TEST MOVEMENT.

arms or beaters. The proper proportions of cement and water, and, in certain cases, sand, are then placed inside, the lid screwed down, and the contents churned up into the consistency of cream. This is now ready to be blown into the crack, the mouth of which on either side of the wall has meanwhile been clayed up to prevent the grout from escaping. The compressed air is then admitted to the grouting pan, and as soon as the necessary valve is opened, the contents are discharged into the wall, the operation being commenced at the level of the ground. Having thus at our command an apparatus by which cement can be blown right into the heart of any structure, whereby all the loose particles of stone and the opposite sides of the crack can be agglutinated, or, more properly, cemented together, we have the power of repairing injured buildings without being compelled to pull them down. The expense of grouting is very small, and does not generally amount to one-fiftieth or even one-twentieth part of the cost of pulling down and rebuilding." At St. Paul's the latter alternative, demanded in a notice served by the Corporation on the Cathedral authorities, would involve enormous expense and closing the Cathedral for many years.

"LARGER THAN ANY KNOWN LAND ANIMAL": A FOSSIL-HUNTER'S VISION OF THE ENORMOUS GIGANTOSAURUS.

RECONSTRUCTION DRAWING MADE FOR "THE ILLUSTRATED LONDON NEWS" BY ALICE B. WOODWARD, AND BASED ON SCIENTIFIC DATA FROM BONES DISCOVERED IN TANGANYIKA.



AS IT PROBABLY APPEARED IN LIFE IN TANGANYIKA: THE HUGE DINOSAUR, GIGANTOSAURUS, VISUALISED BY A FOSSIL-HUNTER DREAMING BY HIS DESERT FIRE, BESIDE AN UNEARTHED HUMERUS TWICE AS LONG AS THAT OF THE 80-FT. DIPLODOCUS SKELETON IN THE NATURAL HISTORY MUSEUM.

The recent discovery of Dinosaur remains by the British Museum expedition to Tanganyika is described by Mr. L. S. B. Leakey in his article on page 92, and illustrated there as well as on page 93. In a note on her drawing Miss Woodward writes: "The fossil-hunter who discovers gigantic fragments of creatures of the past must sometimes try to visualise the huge monsters to whom they belonged. Could the *Gigantosaurus*, whose humerus is double that of *Diplodocus carnegii*, rise before him, it would be indeed a terrifying spectacle." Discussing how the Dinosaurs lived and died, Mr. Leakey has stated that in Tendaguru, where the bones were found, the subsoil is soft clay, and the place is believed to have been on the seashore millions of years ago. Dinosaurs then wandered there in herds, and sometimes one would step on clay too yielding to sustain his weight, and would sink like a man engulfed in quick-sands. Mr. Sidney F.

Harmer, of the British Museum (Natural History), in a letter to the "Times" appealing for financial support of the expedition, says: "Its primary object is to obtain the bones of *Gigantosaurus*, a Dinosaurian reptile of stupendous size, which was discovered by the Germans a few years before the war. The colossal dimensions of this creature, which was larger than any other known land animal, may be appreciated by a comparison of the well-known skeleton of *Diplodocus* in the Reptile Room at South Kensington with a cast of the humerus of *Gigantosaurus* in one of the Palaeontological Galleries. *Diplodocus* exceeded 80 ft. in length, and its humerus measures about 3 ft. 6 in. The total length of *Gigantosaurus* cannot at present be estimated, but its humerus is rather more than 7 ft. long, or fully twice the length of the corresponding bone of *Diplodocus*." [Drawing Copyrighted in the United States and Canada.]

MENACED BY MIMIC "SIEGE": THE NEW DELHI, SEEN FROM THE AIR.

PHOTOGRAPHS SUPPLIED BY THE "TIMES."

"YOU SEE
DOWN
BELOW WHITE
BUNGALOWS
AND
STRAIGHT
WELL-METALLED
ROADS RADIATING
IN ALL
DIRECTIONS":
PART OF THE
RESIDENTIAL
QUARTER OF
THE NEW
£15,000,000
CAPITAL OF
INDIA, AT
DELHI—AN AIR
VIEW.



TO CONTAIN
THE CHAMBER
OF PRINCES,
THE COUNCIL
OF STATE, AND
THE LEGIS-
LATIVE
ASSEMBLY:
THE GREAT
ROTUNDA AT
NEW DELHI
KNOWN AS THE
"TRINITY
CHAMBER,"
WHICH IS
EXPECTED TO
BE READY FOR
OCCUPATION IN
MARCH 1926—
A PHOTOGRAPH
TAKEN FROM
THE AIR.

Delhi is of topical interest at the moment, apart from the building of the new capital, from the fact that the first big manoeuvres of the Indian Army held since 1912 have been arranged to take place near the city. The scheme is an imaginary war between the Punjab and the United Provinces, during which Rajputana, at first neutral, throws in her lot with the victorious Punjab, enabling its forces to advance on Delhi. The progress of the new Government buildings (begun twelve years ago), to the designs of Sir Edwin Lutyens and Mr. Herbert Baker, was described recently by the Delhi correspondent of the "Times." "New Delhi," he writes, "will probably be fully occupied by the Government of India at the

beginning of the cold weather of 1926-7. Although the houses of the officials are practically complete, and the rooms of the Secretariat will be ready by next October, Viceregal Lodge and the circular building which is to hold the Chamber of Princes, the Council of State, and the Legislative Assembly cannot be ready until March 1926. . . . From the nearly finished roof of the northern wing of the Secretariat you see down below white bungalows and straight, well-metalled roads radiating in all directions." The new capital—the eighth to arise at Delhi—is to cost some £15,000,000. Air Vice-Marshal Sir Sefton Brancker, Director of Civil Aviation, visited Delhi during his air tour in India, and flew thence to Allahabad on January 12.

THE DOG AS FISHERMAN: CANINE SPORT WITH SALMON AND SHARK.

PHOTOGRAPH NO. 1 BY COURTESY OF DR. WALDEMAR JOCHELSON AND "NATURAL HISTORY," THE JOURNAL OF THE AMERICAN MUSEUM. NO. 2 BY SPORT AND GENERAL.

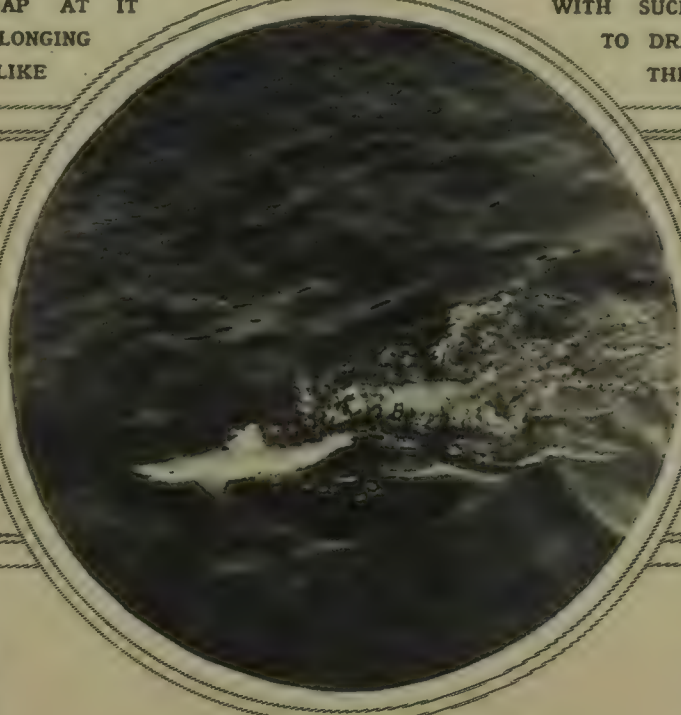


1. "WHEN THEY SEE A FISH THEY SNAP AT IT MISS IT": A NEWFOUNDLAND DOG (BELONGING ACCOUNT, IN A RIVER OF KAMCHATKA, LIKE

WITH SUCH A CERTAIN AIM THAT THEY RARELY TO DR. JOCHELSON) HUNTING SALMON ON HIS OWN THE DOGS AND BLACK BEARS OF THE REGION.

DOGS are known to catch fish either to obtain food or merely for sport, or to assist men in fishing. In a very interesting paper on the subject in "Natural History," Mr. E. W. Gudger says (quoting other authorities): "In Kamchatka during the summer the dogs . . . vary their food by catching their own fish fresh from the water, wading in belly-deep to do so. . . . When they see a fish they snap at it with such a certain aim that they rarely miss it: in doing this their whole head is frequently under the water. When they get a super-

[Continued opposite.



abundance . . . when the salmon come up the rivers in shoals, they eat the heads only, as being the finest-flavoured part of the fish, leaving the bodies." Many other stories of canine skill in "fishing" are told, among others one from Scotland about a Newfoundland dog which plunged into the Clyde after a small cod which it saw leaping out of the water. The dog dived and reappeared with the fish, which it brought to its master. The upper photograph on this page was taken by Dr. Waldemar Jochelson, Ethnologist of the Russian

[Continued below.

[Continued.]
Geographical Society's expedition to Kamchatka. Describing (in another number of "Natural History") the fishing habits of black bears, a sport in which his Newfoundland dog also indulged, he writes: "The bears stood with their hind legs in the mountain rivers and creeks,

2. DOG VERSUS DOG-SHARK: A UNIQUE SNAPSHOT OF AN ENCOUNTER IN THE SEA NEAR LOS ANGELES, ON THE COAST OF CALIFORNIA.

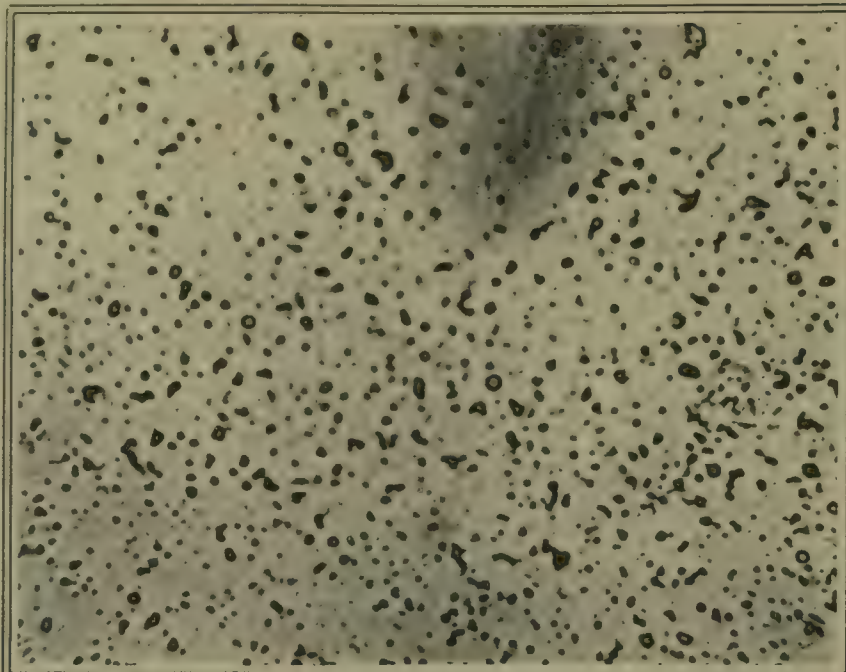
and with their front paws they managed to throw out on the banks sea salmon. . . . Eating off the heads and spines, the most palatable parts of the fish, they cast away the remainder. The movements, turnings, leapings, and jumpings, were so amusing that we could not restrain our laughter."

AT HOME AND ABROAD: NOTABLE OCCASIONS AND PERSONALITIES.

PHOTOGRAPHS BY PHOTOPRESS, TOPICAL, VANDYK, SWAINE, ELLIOTT AND FRY, I.B., AND SPORT AND GENERAL.



MEASURING THE DENSITY OF LONDON FOG: BLOTTER-PAPER DISCS BEFORE (LEFT) AND AFTER THE TAKING OF A KENSINGTON RECORD (SHOWN BY THE RING OF SPOTS ON THE EDGE OF THE RIGHT DISC).



FOUND TO FALL AT THE RATE OF 516,000 A MINUTE ON A SQUARE INCH: SOOT PARTICLES (HIGHLY MAGNIFIED) FROM A FOG RECORD BY DR. J. S. OWENS, AT CHEAM.



MEASURING FOG AT KENSINGTON FOR THE METEOROLOGICAL OFFICE: INSERTING A DISC INTO THE APPARATUS, INTO WHICH FOG IS DRAWN BY A TUBE.



THE U.S. SECRETARY OF STATE, WHO HAS RESIGNED: MR. C. E. HUGHES.



APPOINTED U.S. SECRETARY OF STATE: MR. F. B. KELLOGG, AMBASSADOR TO BRITAIN.



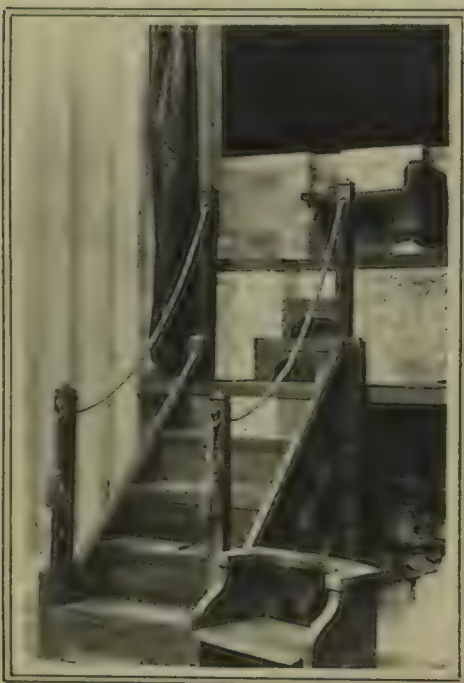
THE STATE CHAMBERLAIN, WHO HAS RETIRED: SIR DOUGLAS DAWSON.



A GREAT "EGYPTIAN IRRIGATION" ENGINEER: THE LATE SIR WILLIAM GARSTIN.



SAMPLING LONDON FOG: INSERTING THE TUBE OF A SOOT-GAUGE INTO A BOTTLE BELOW ON A KENSINGTON ROOF.



TO BE DEDICATED, PROBABLY IN THE PRESENCE OF THE QUEEN: THE RESTORED STONE BISHOP'S THRONE IN NORWICH CATHEDRAL.



THE BRITISH TEAM IN A SKI RACE v. SWISS UNIVERSITIES AT MÜRREN: (L. TO R.) MESSRS. JOANNIDES, LLOYD, MORLAND, FORD, MACKINTOSH (CAPT.) AND VISCOUNT KNEBWORTH.



TO BE AUCTIONED: THE OLDEST KNOWN MICROSCOPE, MADE IN 1665, FROM THE CRISP COLLECTION, WITH A SMALL ONE OF LATER DATE.

The Meteorological Office has had ample opportunity lately of studying the composition of London fog. Their apparatus at Kensington records, in spots on blotting-paper discs, the density of samples of fog drawn in through a window. A soot-gauge on the roof receives deposits in a basin, and rain carries these down through a tube into a bottle below, which is then taken within for analysis. Fog measurements were also made at Cheam by Dr. J. S. Owens, of the Coal Smoke Abatement Society, who found that 516,000 particles fell on a square inch every minute. Highly magnified, they could be counted on a section of a "cover plate." The average diameter of a particle is 1-25,000th of an inch.—Mr. C. E. Hughes, the United States Secretary of State since 1921, recently resigned, and is succeeded by Mr. F. B. Kellogg, U.S. Ambassador in London.—Brig.-General Sir

Douglas Dawson, who became State Chamberlain in 1920, had held Court appointments for many years, and formerly saw much active service in Egypt and the Sudan.—Sir William Garstin began irrigation work in Egypt in 1885. His greatest engineering works were the Assiut barrage and the Assuan reservoir.—The ancient Bishop's Throne half-way up a Norman arch behind the High Altar in Norwich Cathedral is to be re-dedicated, for occasional use, on January 25, when the Queen hopes to be present.—Better weather in Switzerland recently has produced many winter-sport events. On the Cresta Run at St. Moritz (illustrated on page 83), the Bacon Speed Cup was won on the 9th by the Earl of Northesk.—The seventeenth-century microscope shown above is to be sold shortly at Messrs. Stevens's auction rooms in Covent Garden.

FROM THE WORLD'S SCRAP-BOOK: ITEMS FROM THREE CONTINENTS.

PHOTOGRAPHS BY SPORT AND GENERAL AND C.N.



LEAVING NEW ZEALAND AFTER HIS SUCCESSFUL TERM AS GOVERNOR-GENERAL: LORD JELlicOE, WITH LADY JELlicOE (ON UPPER DECK) SAILS FROM WELLINGTON.



THE FIRST NEW CRUISER OF THE RECONSTRUCTED GERMAN NAVY: THE NEW "EMDEN" LAUNCHED AT WILHELMSHAVEN.



WINTER SPORT IN WASHINGTON: SKATING NEAR THE MONUMENT TO GEORGE WASHINGTON, SEEN FROM THE STEPS OF THE LINCOLN MEMORIAL.

Lord Jellicoe, whose handling of the Grand Fleet at Jutland has recently been praised in a new book by Admiral Sir Reginald Bacon, left New Zealand on the conclusion of his term of office as Governor-General, on November 26, for Australia, for a short stay there until he sailed for England in the "Mongolia" on December 22. Our photograph shows Lord and Lady Jellicoe standing on the upper deck of the liner "Tahiti," as she left the wharf at Wellington, where the guard of honour is seen (on the crane platform to the left) cheering as the ship moved away. Lord Jellicoe was placed on the retired list as from December 5, having reached the age limit of 65. He was only 12½ when he entered the



A RELIC OF THE OLD RÉGIME IN CONSTANTINOPLE: THE ANCIENT STATE CAIQUE FORMERLY USED BY THE SULTANS OF TURKEY—PROPELLED BY 144 ROWERS.

Navy as a cadet in 1872. In 1919 he was promoted to Admiral of the Fleet.—A new German 6000-ton cruiser launched at Wilhelmshaven on January 6 was "christened" as the "Emden." She is the third of that name in the German Navy. The second was sunk during the war by the Australian cruiser "Sydney" at Cocos Island, after having destroyed some £2,000,000 worth of Allied shipping in the Indian Ocean.—In Washington, as our photograph shows, skaters may enjoy their sport between the monuments to George Washington and Abraham Lincoln.—The old state barge formerly used by Sultans of Turkey, and now laid up in the naval dockyard at Constantinople, is 280 years old and weighs 110 tons.

"AN AMAZING MAGH (JANUARY) MELA": A HINDU BATHING FESTIVAL.

PHOTOGRAPHS AND DESCRIPTION BY HAROLD BROOKE.



"A GREAT SEA OF FLAGS AND BANNERS BELONGING TO THE VARIOUS CASTES": HINDU PILGRIMS GATHERED IN THEIR THOUSANDS BESIDE "MOTHER" GANGES, DOUBLY HOLY WHERE SHE JOINS THE JUMNA, FOR THE JANUARY BATHING FESTIVAL AT ALLAHABAD.

"So light-heartedly does the Englishman take his ablutions," writes Mr. Harold Brooke, "that more frequently than not he whistles or sings in his bath. Other pleasures he may accept sadly, but not the delights of the bath. With the Hindu it is different. Personal cleanliness for him is not *next* to godliness, it is godliness itself. Bathing is a creed, a religious rite; the benefits are spiritual, transcendental. You must not expect, then, to hear the Hindu bather singing or whistling. It is much too serious a business for that, and one for which he is prepared to make extraordinary sacrifices. . . . To

appreciate fully to what lengths the Hindu will go to indulge his passion for bathing, you must see him in his thousands, sometimes in his millions even, at such a place as Allahabad during one of the great festivals. Allahabad ('City of God')—incidentally capital of the United Provinces—is one of the most holy places on the banks of the sacred 'Mother' Ganges. Each year is staged there, in Nature's own setting, the amazing drama of the Magh (January) Mela, which attracts pilgrims from the remotest corners of the Indian Empire. From the middle of January until the middle of the

[Continued on left.]

[Continued.]

following month one vast, moving, colourful mass of humanity is to be seen concentrated near the massive fort which the Emperor Akbar built, and which is now occupied by British troops. Here the mighty river rolls by with its majestic sweep to join with the Jumna, and is it not written in the Vedas that spiritual merit is to be acquired by contact with these waters? Thus to bathe at the confluence of the two rivers is to experience a double potency. Furthermore, legend tells of another river, only visible to the eye of faith, at this hallowed spot. The scene presented by the Allahabad festival each year is probably not paralleled in any other country to-day, although, to borrow the words of De Quincey, 'some such spectacle of nations crowding upon nations, and some such Babylonian confusion of dresses, complexions, languages,

[Continued opposite.]



IN A PECULIAR THATCHED DECK-CABIN: A FAKIR BEING ROWED TO THE BATHING PLACE, WHERE "THE WATER WAS COVERED WITH BOATS AND BARGES."

[Continued.]

and jargons' was doubtless furnished by ancient Rome. One morning, with a party, we set out early to view the scene from an elephant's back. Clouds of blinding dust rose from the parched roads, crowded as they were with pedestrians and all manner of vehicles, conceivable and inconceivable—the nerve-wracking tonga, purdah-ekkas (where the modest female hid her beauty, peeping out occasionally from behind the curtains to see the 'fun of the fair'), tikka gharris, more ambitious turn-outs, motor-cars, elephants, camels—all cheek by jowl. A strange pilgrimage indeed! On a wide stretch of land—submerged during the Monsoon, but now dry—was a 'city' where the pilgrims encamped during their visit, tents, marquees, and shacks (made from rushes) having sprung into being with mushroom-like rapidity. . . . A great sea of

[Continued below.]

[Continued.]

flags and banners, belonging to the various castes, stirred gently in the light breeze. . . . Dresses were dazzling in their variety of gaudy colour. Near the shore the surface of the water was covered with innumerable boats and barges, some of them tenanted by rajahs and ranees, and some of which by their splendour reminded one of the barge of Cleopatra. . . . In the water itself were bathers of all ages, men, women, and children, the halt and the lame, the rich and the poor, dipping and shivering, as at the time of the day the sun had scarcely exerted its scorching influence. For this moment of

ecstasy some of the pilgrims had tramped hundreds of miles, and others, by way of penance, or because of infirmity, had crawled long distances along the roads on their hands and knees. For a whole month this frenzied bathing continues; for a whole month there is a never-ending stream of pilgrims. Once you have seen them wending their way across the country, through the yellow mustard fields, along the dust-covered roads, then, finally enduring the cold river—you will no longer ask why the Hindu does not sing or whistle while engaged in his ablutions; you will no longer doubt his devotion to his faith."



SHOWING A SACRED BRAHMINI BULL IN A BOAT: THE ANNUAL MAGH MELA AT ALLAHABAD, WHERE THE BATHERS SOMETIMES NUMBER TWO MILLIONS, AND A MUSHROOM "CITY" OF TENTS, MARQUEES, AND SHACKS ARISES ON THE BANK OF THE GANGES.

A NAVAJO NIGHT CHANT: WHIPPING A NOVICE; SAND-ART PRAYER.

PHOTOGRAPHS BY COURTESY OF THE AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK.



"A GODDESS IS WHIPPING THE YOUTH WITH YUCCA LEAVES": A BOY'S INITIATION DURING THE NIGHT CHANT (YEBITCHAI) CEREMONY AMONG THE NAVAJO INDIANS OF ARIZONA — PART OF A NEW MODEL GROUP IN THE AMERICAN MUSEUM.



INVOKING RAIN AND GOOD CROPS BY SYMBOLIC SAND-PAINTINGS: A NAVAJO ARTIST DESIGNING A CROSS, GODS, AND CORN PLANTS, IN A RAINBOW BORDER, WITH A VESSEL OF WATER IN THE CENTRE REPRESENTING A LAKE.

These remarkably life-like models, representing domestic and religious customs of the Navajo Indians of Arizona and New Mexico, with the Canyon de Chelly, where they live, as a scenic setting, form part of a new and beautifully executed ethnographic exhibit in the American Museum of Natural History at New York. The group illustrates the famous Navajo Night Chant (Yebitchai), a ceremony of healing and invocation. "In the background a youth is being initiated. Up to this time he is supposed to believe that the gods themselves attend these ceremonies and mingle in the dances with men. Now the gods remove their masks and he recognises the wearers as friends. A goddess is whipping the

youth with yucca leaves. The talking god stands by, ready to sprinkle the novice with cornmeal. . . . In a ceremonial lodge a Navajo artist is executing one of the sand paintings done each day. These paintings picture supernatural beings or mythical happenings. This particular painting shows a cross, at the ends of which are gods, and a rainbow forms a border. Corn plants grow from the centre, in which a vessel of water represents the lake on which the cross is supposed to be floating. . . . This sand painting and many songs and prayers call for rain and a good harvest. During the nine days of the ceremony, about five hundred songs are sung."

THE WORLD OF WOMEN.

A FEW hours' sunshine is a glorious thing, and does much to make us forget our long experience of gales and floods. Threats are held over our devoted heads by the Meteorological reports, but we take the sunshine while we may, and refuse to go out to meet disturbances half way. The King and Queen are having a quiet, restful time at Sandringham. Her Majesty's new Ladies—or, rather, one new Lady, for Lady Desborough goes one up, having been long a Woman of the Bedchamber—of her Household will not be on duty yet for a while. Lady Elizabeth Hesketh Prichard, who takes the place of the late Lady Elizabeth Dawson, is the widow of the late Major Hesketh Vernon Hesketh Prichard, who was a well-known author, sportsman, and soldier, and who won a D.S.O. and an M.C. She is one of the five sisters of the Earl of Verulam, and her mother was first the wife of the late Aeneas Mackintosh of Mackintosh, and the mother of Lady Baring; he died within a year. Later she married the late Earl of Verulam. Lady Elizabeth is a widely travelled and well-read lady, already well known to the Queen. Her mother is one of the Grahams of Netherby, sister to the Duchess of Montrose. Netherby, which is a big place near Carlisle, and one celebrated for the royal and distinguished guests who have stayed there and for its fine mixed shootings, is to be closed. Lady Cynthia Graham is one of the very handsome daughters of the late Earl of Feversham. Sir Richard and she have two sons and one daughter.

Men love a waist-line in the place where Nature put it. To them it is a sign-manual of youthful elegance, and now that women have discarded it in favour of Noah's-wife straightness of line, they are developing it. In evening dress, in pink by day or night, and in country dress, it is more apparent than in ordinary workaday garb. Being in many respects closely akin to ourselves, the men who have lost their waist-line crab those who carefully cultivate it, and ask tender questions about corsets. I learn from an exquisite whose figure is a fortune—certainly a slight one, whichever way you take it—that corsets are anathema to the modern young dancing man, he must be *svelte* and keep himself slim and supple; a resort to force is a thing simply "not done." It is good to think that some price has to be paid for manly elegance in the ball-room.

Prince Henry is to have a hunting and shooting visit with the Duke and Duchess of Buccleuch, beginning this week, at Langholme Lodge, Selkirkshire. One of the Duke of Buccleuch's

sons, Lord William Scott, is his Royal Highness's brother officer and Equerry, and the Prince thoroughly enjoys being included occasionally in the youthful family of the Duke and Duchess of Buccleuch. The Duchess intends to bring out her youngest daughter, Lady Angela Scott, this season; she is in her nineteenth year. The Earl and Countess of Dalkeith have a son and a daughter. They are a cheery pair, but are away, and not of the family party. Langholme was a favourite home with the late Duchess, who, for many years after they were men and women kept her children's nurseries and toys there just as they used them.

The Prince of Wales was in town for a day or two on duty. His one aim is to get in as much hunting as possible. Frost following flood would soon make conditions impossible, so his Royal Highness lost no time. One's smiles are loud and frequent on reading in an American weekly that England was saved from a revolution by an American Press agent. We know, of course, that they won the war, these all-conquering cousins of ours across the "fish-pond." That they have kept us free from revolution is quite a new idea. Doubtless we shall hear soon that the sun's shining on Great Britain, rare as it is, is due to American courtesy. Mrs. Poyser's celebrated remark in "Adam Bede" that "he was very like a cock that thought the sun rose to hear him crow," might well apply to a certain section of the American Press!

The marriage of Sir Derrick Watson of Earnock and Miss Peggy Robertson Aikman, of The Ross, Lanarkshire, is one that will unite two families of great sporting traditions. Colonel Robertson Aikman is a well-known sportsman and M.F.H. Mrs. Robertson Aikman's father was Captain J. A. Middleton, who was for many years Master of the East Fife Foxhounds. His brother, great-uncle of the bride-elect, was the celebrated cross-country rider, Captain "Bay" Middleton, from whom the ill-fated Empress of Austria, a great sportswoman, requested a lead when hunting in England. The Ross, a fine old place, was burnt two or three years back, and a loss of valuables, including some fine pictures, was sustained. The Watsons are a Fifeshire family; the present Baronet, Sir Derrick, is in his twenty-fourth year: he succeeded his brother Sir John, who was in the 16th Lancers, and was killed in action in 1918. They are quite young,

this engaged couple, in the early twenties; as they have long known and cared for each other, the marriage is not likely to be delayed.

The Marquess and Marchioness of Exeter took a merry party of young people to the Stamford Infirmary Ball, and had some happy parties at Burghley. Their elder son, Lord Burghley, will celebrate his twentieth birthday on Feb. 9. Their elder daughter, Lady Winifred Cecil, is out. Lady Romaine, her younger and only sister, is not yet ten years old. The tradition of the Lord of Burghley and the beggar-maid occurs nowhere in the lineage of this family of Cecils, and is probably mythical. The present Marchioness of Exeter, tall and good-looking, is the only surviving sister of Lord Bolton.

There is to be an all-women meeting, place not as yet settled. From this Eden, in which will be acclaimed the latest of our sex who have been included in a New Year's Honours List, Adam and serpent will be excluded. The inspirer of this movement, certainly an inspiring one, is the evergreen Mrs. Kendal, and the representative women whom all women will gladly acclaim are Dame Ellen Terry, Dr. Jane Walker, and Dame Aldrich-Blake. Women have waited long to see the first-named of this distinguished trio acknowledged. Honours she won and has worn this many years, and Ellen Terry, our great actress, is more to us who love her for what she has done for us than "Dame," glad as we are that she should use the first title accorded to members of our own sex for their own attainment. There will be three short speeches, one by a theatrical and two by scientific ladies; replies by the guests of honour, and presentations to the three acclaimed ladies. What building will be big enough for the women who want to attend? Men need not apply!

A. E. L.



An artistic corner furnished in Queen Anne style, which is much in vogue at the moment. Each piece is a perfect reproduction, built by Hamptons, Pall Mall East, S.W. On the floor is a genuinely old Persian rug which hails from the same salons. (See page 118.)

MONTE CARLO: WHERE SPRING REIGNS ETERNALLY.



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English Visitors desiring further details or information will receive it free of charge from all Travelling Agencies such as "Office Français du Tourisme," 56 Haymarket, or by writing to Madame Hénon, Villa Le Palis, Rue des Roses, MONTE-CARLO.

The World of the Theatre.

THREE HONOURS.—THE JEWISH DRAMA LEAGUE.—RECENTLY PUBLISHED PLAYS.

WHOEVER compiles the list of Honours, be it the new Home Secretary or the Premier, he has hit public fancy this time. The Knighthood conferred upon Edmund Gosse, our premier book-

societies at the Jewish College in Tavistock Square. They had come from the four corners of London and from the provinces, and they were on business bent. A very charming and eloquent speaker, Sir Hermann Gollancz, Master of Arts and Rabbi, occupied the chair and set out the object of the meeting—a Federation of Jewish Dramatic Societies for the following purposes—

- To promote interest in Jewish Drama.
- To assist in the production of plays of Jewish interest.
- To advocate the utilisation of characters and incidents in Jewish history and literature as themes for plays.
- To form a library of plays on Jewish themes.
- To establish a bureau of information for Jewish amateur dramatic societies.
- To provide a wardrobe of costumes for the use of such societies.
- To publish a magazine on matters of Jewish dramatic interest.

Years ago there was such a Federation of the non-sectarian dramatic societies, and I was its first president. We federated well; we met in Bristol or Sheffield, where we stimulated the interest in better-class drama; in Bristol it led to Miss Muriel Pratt's plucky effort to create a Repertory Theatre. We all gave a few select performances, and we were looking forward to great things, when the war broke out. That was a death-blow. Somehow, somewhere, there there must still be the books and a little fund of the Federation, but, like the tomb of the late lamented Tutankhamen, the treasure trove is not wholly explored. Some day may bring a revelation.

The material, then, is abundant and ubiquitous; the actors, too, are ready and galore. If the Jews only leave alone plays that neither fit their temperament nor their idiosyncrasies, they are the best amateurs of all, for in them glows fire and imagination—two of the most valuable gifts of the actors' dower. Here's luck and power to the Jewish Drama League!

J. T. G.

I have just finished a batch of good, bad, and indifferent—mostly indifferent—plays, but some of them, at any rate, are worthy of commendation. After a perusal of one of the least satisfactory among them, it was refreshing to pick up Mr. Coward's "Rat-Trap" of marriage. It has, at any rate, dramatic interest, and some truth in it. But he has pinned down this vulgar type far more effectively in "The Vortex." The unfaithful, selfish husband of "The Rat-Trap" is of the same kidney as the selfish, unfaithful butterfly wife in the latter play. The essential difference between these two examples of Mr. Coward's work is that, while "The Vortex" convinces by its logic, "The Rat-Trap" fails to impress because his *dénouement* crumbles to provide a happy ending. "The Masque of Venice," by George Dunning Gribble, was a delight. I felt a sweeter, cleaner wind blowing. It has a lively wit, a pretty fancy, a genial humour, and a nip of satire. He tilts at the idealistic humbugs we all have met, and his sketch is neat enough to be deliciously recognisable. These two plays are issued in "Contemporary British Dramatists" (Benn; 3s. 6d. each). Then I picked up "The Same Star," by E. V. Lucas (Methuen; 3s. 6d.). What a pen! I think of his

delightful essays, and what is their charm? It is their whimsical observance, their swift moods and carpet-slipper intimacies, their slender, discursive themes. This comedy has all these literary graces, but I fear this humorous picture of hotel life is too thin to bear the fierce glare of the foot-lights.

Of Susan Glas-pell enough has been said. She certainly strikes a new note—an erotic, hysterical feminine note. She has technical skill, a fine sense of theatrical values, and an intuitive understanding of character. "The Verge," "Bernice,"

and "Inheritors" ("Contemporary American Dramatists," Vols. 1, 2, and 3; Benn; 4s.), are plays worth reading and worth producing. G. F. H.



PRINCIPAL HUMOURIST AMONG THE PLAYERS IN "A MIDSUMMER NIGHT'S DREAM" AT DRURY LANE: MR. WILFRID WALTER AS BOTTOM THE WEAVER.

reviewer (and connoisseur) has gladdened the literary world; the Dame-ship proffered to Mrs. Fawcett, that wonderful champion of Women's Causes, who has done more for the acquisition of the vote than all the militant suffragettes, is a tardy recognition of a great Englishwoman; last but not least, the same title bestowed on Ellen Terry is perhaps the most radiant feature of the New Year's Day list. To be frank, Dame Ellen Terry's distinction has arrived not a day too soon. In any other country she would have been honoured years ago

(that Sarah Bernhardt received the Legion late in life has its special reason)—indeed, as long as twenty years ago, when Irving was knighted, there was a movement to get "something" for our Ellen. But there was no "something" to give, and in high quarters there was a certain reluctance to exalt women otherwise than by Red Cross decorations. Anyway, nothing happened, and our Ellen stood aloft among the people of England as plain Mr. Gladstone did in his time. Nor does the title change the situation; it merely intensifies it.

Our public is a fetish-worshipper. When Lady Blank, who yesterday was plain Mrs. Blank, sails into a salon of the *bourgeoisie*, the other women swim after her in homage like so many little fishes. We are snobs; and, where there are snobs, a title is a lighthouse. So it was well that our Ellen should have received the hall-mark from above. She stands haloed before the masses, and she will enhance her enormous popularity by the favour of her Sovereign. To us who live with and for the theatre, she remains what she has always been—the sweetest, dearest, simplest soul that ever was, whose smile radiates like sunshine, whose helpfulness to the young is the impulse of a kind heart, and one that never forgets the difficulties of the upward grades.

May Ellen Terry long be spared to enjoy her glorious laurels! We cherish her not only as a woman, but as a symbol of the best in the histrionic art of this great country.

That was very interesting, that gathering of all the principal representatives of the Jewish amateur



MR. MILES MALLEISON AS SNOOT THE TINKER.



MR. ALFRED CLARK AS SNUG THE JOINER, IN THE LION'S PART.



MR. H. O. NICHOLSON AS STARVELING THE TAILOR.

"HARD-HANDED MEN THAT WORK IN ATHENS HERE": PLAYERS IN THE "PYRAMUS AND THISBE" INTERLUDE IN "A MIDSUMMER NIGHT'S DREAM," AT DRURY LANE.—[Photographs on this page by Pollard Crowther, F.R.P.S.]

Meanwhile, at the Jewish meeting things crystallised soon into something tangible. A president was appointed—the best president conceivable; one of the greatest Jewish authors of our time, a man who is worshipped abroad while England only honours him—oh, the fate of prophets! I refer to Israel Zangwill. We all greeted his name by acclamation. Then, after a pithy speech by Mr. M. J. Landa, who has pioneered Jewish plays in the East End and guided the hearers into the right channel, vice-presidents were elected: first and foremost, Sir H. Gollancz, and next—I say it bashfully—the present writer, probably because I am very familiar with the Jewish drama all the world over.

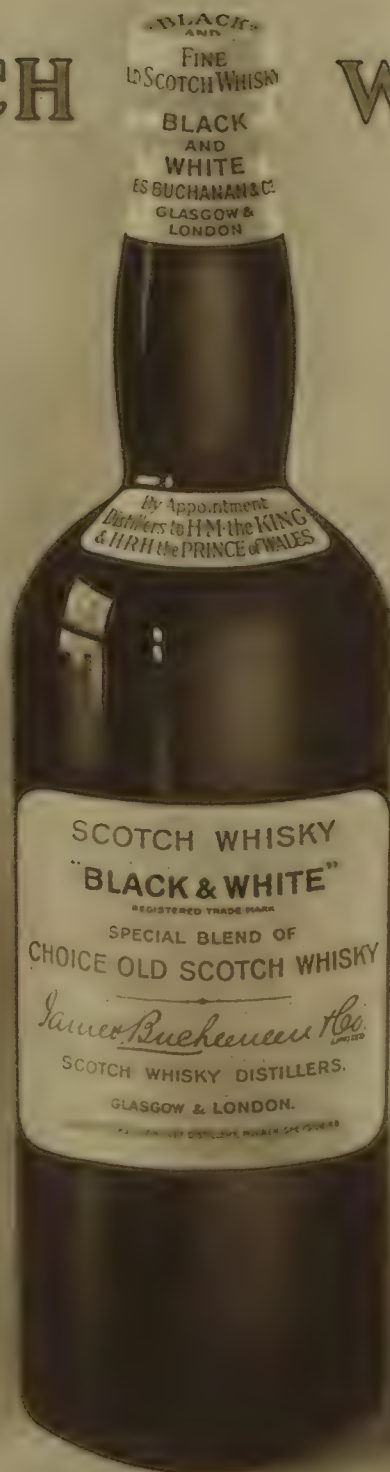
Some would think that "Potash and Perlmutter" plays are the mainstay of the Jewish drama. But that is a great fallacy. The number of Jewish plays extant, modern and old, is inexhaustible, as I ventured to put it. There is a whole literature ranging from Max Nordau and Hertzl to Schnitzler, Heyermans, Salona Asch, and the Yiddish writers who have their own theatres and give their own plays in every large city in Europe save London, where Yiddish theatres are intermittent. In little Antwerp—due to the diamond trade—I counted no fewer than four little Jewish theatres. Little flea-hives they were—but the drama inside was worth hearing and seeing. It bubbled over with originality and humour. And in Vienna recently I saw a triple bill at a Jewish theatre so unspeakably funny that my companion, Sil Vara (one of Austria's foremost dramatists) and I nearly broke blood-vessels in uncontrollable fits of laughter.



CHIEF "SPELL-BINDER" IN "A MIDSUMMER NIGHT'S DREAM," AT DRURY LANE: MR. D. HAY PETRIE AS FUCK.

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CHESS.

TO CORRESPONDENTS.—Communications for this department should be addressed to the Chess Editor, 15, Essex Street, Strand, W.C.

- ARTHUR MOSLEY and W A SMITH (Brisbane).—Your charming Christmas card shall have due honour paid to it in our next issue, and we heartily reciprocate your good feelings so artistically expressed.
- E BOSWELL (Lancaster).—Thank you very much for your letter; it is a matter of much satisfaction to us that our opinion of the problem in question is fully endorsed by a judgment so competent and independent as yours.
- E G B BARLOW (Bournemouth).—Yours stands alone among many ingenious attempts; but after 2. R to K 4th, where does mate follow if the reply is B to Kt 7th or P to B 4th?
- JAMES W SMALLEY (Brooklyn, U.S.A.).—We are sorry that in your first effort you have fallen into the error we are always warning beginners against—that in seeking a solution they should not begin with a check.
- G M MARTIN (Bhatpara, India).—Like many others, you have tumbled into the pit over 3944. The reply to your proposed solution is 1. —, R to R sq.
- D B MACAULAY (Waterloo, Liverpool).—You are to be congratulated on your debut as a solver, for all your solutions are correct. For two-movers the key-move is sufficient, for three-movers the main variation at least should be given.
- A CARRINGTON SMITH (Quebec).—There is just one little move your reply to No. 3945 fails to take account of, and that is 1. —, P to Q Kt 8th (Queens).

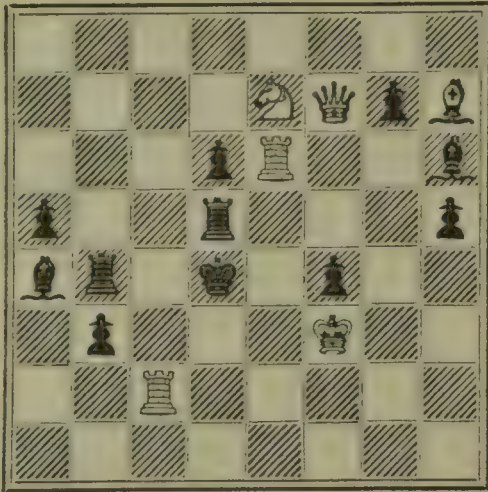
CHESS IN ENGLAND.

Game played in the Championship Tournament of the City of London Chess Club between Messrs. V. L. WAHLTUCH and P. W. SERGEANT.
(Queen's Pawn Opening.)

- | | |
|------------------|----------------|
| WHITE (Mr. W.) | BLACK (Mr. S.) |
| 1. P to Q 4th | Kt to K B 3rd |
| 2. Kt to K B 3rd | P to K Kt 3rd |
| 3. P to K Kt 3rd | B to Kt 2nd |
| 4. B to Kt 2nd | P to Q 4th |
- The Flanchetto defence to the Queen's Pawn opening has attracted considerable attention of late, and the present game is a good example of its methods.
- | | |
|-------------------|---------------|
| 5. Castles | Castles |
| 6. Kt to K 5th | Q Kt to Q 2nd |
| 7. Kt to Q B 3rd | P to B 3rd |
| 8. P to B 4th | Kt to Kt 3rd |
| 9. P to K 3rd | B to B 4th |
| 10. P to Kt 3rd | Kt to K 5th |
| 11. B to Kt 2nd | P to B 3rd |
| 12. Kt to Q 3rd | Kt to Q 2nd |
| 13. P to K Kt 4th | Kt takes Kt |
| 14. B takes Kt | B to K 5th |
| 15. B takes B | P takes B |
| 16. Kt to B 2nd | |
- Although looking quite safe, it will be seen in the long run this move contributed materially to White's defeat, as the Kt is immediately cut off from further action until too late. Some other square for the Kt seems a necessary choice.
- | | |
|-----------------|--------------|
| 17. P to Kt 5th | P to K B 4th |
| 18. Q to K 2nd | Kt to Kt 3rd |
| 19. Q R to Q sq | Q to B 2nd |
| 20. P takes P | B takes B |
| 21. P takes Kt | P takes P |
| 22. P to Q 4th | Q R to Q sq |
| 23. Q to Kt 5th | |
- A clearance of pieces at once by

- J C STACKHOUSE (Torquay).—Your reply to No. 3946 was too vigorous to be kind. Did you think we were trying a Christmas joke on our solvers in publishing a problem to be solved in such a fashion? How do you carry on after B to K 5th as a defence to your first move?
- A C VAUGHAN (Wellington).—You are another debutant to be congratulated on your successful first appearance, especially over such a position as No. 3946. The idea of the superfluity of the Rook was the last thought of most who tried to solve the problem.
- REV. A D MEARES (Baltimore).—We are sorry to find you only lengthen the chain of victims claimed by No. 3944; but why did you impute to us the admission of a problem with such a solution?

PROBLEM No. 3948.—By E. BOSWELL.
BLACK.



WHITE.
White to play, and mate in two moves.

SOLUTION OF PROBLEM No. 3946.—By CENTRO MERCANTIL, SEVILLA.

- | | |
|----------------------|-----------|
| WHITE | BLACK |
| 1. R to K Kt 2nd | B takes R |
| 2. Q to K B 2nd | P takes Q |
| 3. B to R 2nd, mate. | |
- If 1. — K takes Kt, 2. Q to Kt 8th (ch), etc.; and if 1. — P to K B 4th or Kt to Kt 3rd, 2. Q to Q Kt 6th, etc.
- We do not think we exaggerate when we say this brilliant composition would have been worthy of S. Loyd in his prime, and a correspondent is well within the mark when he describes it as a gem of the first water. Its dazzling sacrifices proved too incredible for the large majority of our solvers, but those who successfully compassed its difficulties acclaim its beauties in one chorus of admiration. It well deserves the careful study of everyone who wishes to see a splendid example of great chess strategy.
- For the benefit of readers who, through sending their copy of the "I.L.N." to friends abroad, are unable to refer to the diagram of Problem No. 3946, we append the position in letterpress—
- WHITE.—K at K Kt 7th, Q at Q Kt 2nd, R at Q 2nd, B at K Kt sq, Kt at Q 6th, P's at K R 3rd, Q B 3rd, and Q B 4th.
- BLACK.—K at K 4th, B at K R 8th, Kt at K R sq, P's at K Kt 6th, K B 2nd, K 3rd, and Q 2nd.

CORRECT SOLUTIONS OF PROBLEM No. 3942 received from R W Hill (Melbourne); of No. 3945 from W Strangmar Hill (Lucan), W N

Powell (Ledbury), C N Watson (Masham), J M K Lupton (Richmond), and John Hannan (Newburgh, N.Y.); of No. 3946 from L W Cafferata (Newark), R B Pearce (Happisburgh), A C Vaughan (Wellington), James Evans (Goole), G Stillingfleet Johnson (Cobham), E Boswell (Lancaster), J Hunter (Leicester), and C B S (Canterbury); of No. 3947 from C B S (Canterbury), J C Stackhouse (Torquay), W Kirkman (Hereford), S Caldwell (Hove), L W Cafferata (Newark), A W Hamilton Gell (Exeter), J P Smith (Cricklewood), J M K Lupton (Richmond), J Hunter (Leicester), G Stillingfleet Johnson (Cobham), and C A Macfarlane (Paisley).

CORRECT SOLUTIONS OF THE SPECIAL TWO-MOVERS received from D B Macaulay (Waterloo), 6; L W Cafferata (Newark), 6; J Hunter (Leicester), 6; and J P Smith (Cricklewood), 5.

The Hastings Chess Congress proved an unqualified success, and after some highly interesting play ended Saturday, Jan. 3, with the following results. In the Premier Tournament, Messrs. Maroczy and Tartakover tied for first place, Messrs. Yates and A. Steiner for second place, and Messrs. Przepiorka and Seitz for third place. Owing to want of time, these ties could not be played off, and a division of the prize money was arranged. The Premier Reserves Tournament was won by Mr. Opocenski, and the First Class Amateur Tournament by Mr. G. F. H. Packer.

The London Leagues Congress, held at St. Bride's Institute, Fleet Street, E.C.4, was also brought to a conclusion on the same date, when the Major Tournament was won by Mr. J. Birnberg, and the Minor Tournament by Mr. M. Kazi. The Boys' Championship, after a very keen fight, finished with a tie between A. C. Charles, Max Black, and P. E. Bowers, after the last-named had seemed an easy winner. The appearance in this section of a blind boy, Rupert Cross, created much interest, and his play met with high approval, considering how much he was handicapped by his infirmity.

"Burke's Peerage," of which the new edition for 1925 has been issued by the Burke Publishing Company, has thus attained its eighty-third year, and preserves in all respects the high traditions of its predecessors. As an authority on the lineage of the titled families of the United Kingdom (it includes, of course, the Baronetage and Knightage as well as the Peerage) "Burke" has become a household word. Its founder, the first John Burke, was a journalist and man of letters who came to London from Ireland early in the nineteenth century, when the existing books on the aristocracy were histories rather than strictly genealogical accounts. He also introduced the alphabetical arrangement in place of the order of seniority. "John Burke," we read, "was exceedingly fortunate in enjoying the assistance of a brilliant son, who made the British Peerage at once his profession and his hobby. John Bernard Burke, well known during many decades of the Victorian era as Sir Bernard Burke, Ulster King of Arms and Keeper of the State Papers in Ireland, was born in London in 1814 and died in Dublin in 1892." The present edition bears his name and that of the late Mr. Ashworth P. Burke on the title-page, and has been edited by Mr. Alfred T. Butler, M.C. Sir Henry Farnham Burke, Garter King of Arms (brother of the late editor, Mr. Ashworth P. Burke) continues to place his unrivalled knowledge of genealogy and heraldry at the service of "Burke," so that the family connection with the famous red book remains unbroken.

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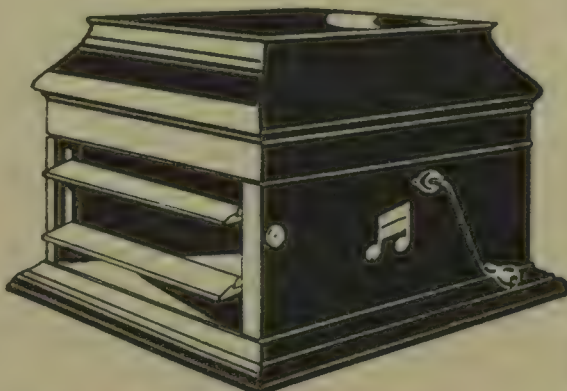
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THE PLAYHOUSES.

MR. ERVINE'S "SHIP." AT THE CENTURY.

THE main theatrical event of the past week was the production of Mr. St. John Ervine's play "The Ship" at the little Century Theatre; but as this piece, the most interesting play given for some months past in London, is sure to find a place soon in a more strictly West-End bill, details of its story can be reserved to a later occasion. Miss Lena Ashwell's band of players interpreted it, and their leader herself made one of her rare but always welcome reappearances, in an old woman's part. The old woman in question is the moderating influence in a drama which shows a conflict of wills; she no doubt represents the author's standpoint and preserves the balance of reason between two irrational and mutually antagonistic egoisms. Here is a conflict between the ideals and passions of seniority and youth; father and son are the rival protagonists. The father, a ship-builder, has one overwhelming desire—to see his son continue the tradition of the firm, and, incidentally, to have him sail on board the firm's new ship when it makes its maiden voyage. The son is a modern humanitarian who hates this age of machinery and wants to go back to primitive civilisation; he is all for farming on old-fashioned lines, and the father, using a disillusioned and unscrupulous ex-soldier, Captain Cornelius, crabs his efforts. The play ends in tragedy, the ship going down with the son on board, but its strong points are its characterisation of parent and son, especially in the crisis of their battle, its cleanly pared dialogue, and its study of an unconventional war-type, Cornelius. Excellent acting was provided at the Century by Mr. Frederick Leister and Mr. Philip Reeves, as well as by Miss Lena Ashwell.

"CAMILLA STATES HER CASE," AT THE GLOBE.

Marry a film "star" hailing from the "free" republic of America to an English baronet of that preposterously old-school type which the Californian cinema studios fondly imagine approximates to the reality, and then see what happens—that would appear to have been George Egerton's formula in "Camilla States her Case." Had Camilla had a naughty past, had her manners been shocking, her language free and easy, her behaviour outrageously bohemian, something might have come of the idea, even with a sawdust dummy of a baronet serving as the target

of her eloquence. But this heroine is as impeccable and winsome as she is devastatingly long-winded. And so, when Camilla "states her case," the old, old



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feminist case, and denounces our feudal institutions, our divorce laws, our income-tax provisions in respect of wives, it is a wholly one-sided affair. There is no one to answer her—her waxen effigy of a husband merely wilts before the storm; and there can therefore be no play, but merely a torrent of uncontested argument. Miss Margaret Bannerman, with her sense of comedy and her gift of pointing speeches, tries her best to ride the storm in Camilla's outbursts; Mr. C. M. Lowne has the unhappy task of striving to galvanise into some semblance of life the dummy baronet; and Miss Mary Rorke, Mr. George Tully, and Mr. Henry Vibart are also in the cast.

"Kelly's Handbook to the Titled, Landed, and Official Classes" (Kelly's Directories, Ltd.; 30s.) is now available in the 1925 edition, which is the fifty first annual issue of this well-known and exceedingly useful work. The fact that the names are given in one general alphabetical list makes it very convenient for reference, while its compact form also tends to ease of handling. The scope of the book, as indicated by its title, covers a large number of people whose names and careers are not recorded elsewhere. The tabulated information at the beginning includes particulars of the Royal Family, foreign orders and decorations, tables of precedence, forms of address, and lists of British Dominions and Colonies, the House of Lords (in order of precedence), the House of Commons (both alphabetical and classified under constituencies), the British Government, and Foreign Ministers and Consuls in London, with the British Ministers in the corresponding countries abroad.

With the new issue for 1925, "Who's Who" (A. and C. Black; 42s. net) reaches its seventy-seventh year of publication. It now contains over 30,000 biographies, but a notable fact regarding the new edition is that, although it has fifty-four more pages than the last, its bulk is considerably less. Thus the peril of obesity, which attacks year-books in these expansive days, has been warded off by a judicious process of mechanical compression. The information is as full as ever, and the book maintains all the characteristic features that make it indispensable as a biographical dictionary of living people of importance. "Who's Who" ranks among those select few works of reference which are so frequently consulted that they usually lie on the table, instead of being relegated to a bookshelf. That in itself "speaks volumes."

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A "BEST BY TEST" Shaving Offer

The Perfect Brush for a Perfect Shave.

We are confident that the new "Mills" hygienic Patent Rubber Shaving Brush really fulfils a long felt shaving "want"; it gives a super smoothness to the skin, and you will feel fresh and "alive" from the massage the "Mills Rubber Brush" gives whilst it lathers. It keeps the skin healthy and clear from blotches or blemishes. No possibility of Anthrax. It will cure sycosis, and is recommended by the Medical Profession, and by the highest authority.

OUR FREE OFFER

We have such faith in our brush that we make every man this unique offer. If, after using the "Mills Patent Rubber Brush" for 30 days (as printed instructions) you are not satisfied, return brush in good condition and we will refund money in full. That's a fair offer that men will appreciate. Prices: 3/3, 3/9, 4/9, 5/9, 7/6, 9/-, 12/6. Medium priced brushes have longer rubber fingers, and higher priced models have soap flange and still longer rubber fingers. Ask your Chemist or Drug Stores for a "Mills" Shaving Brush. If he is out of stock he can quickly get you one, or you can send direct to us on our Free Offer Sale.



Mills' Patent Pneumatic Rubber Shaving Brush Co., Ltd., (Dept. I.L.N.) 2, SWAN MEAD, LONDON, S.E.1

THE SECRET OF HEALTH



The first step—and the most important—towards securing what is more precious than gold is perfect action of the millions of pores in the skin with which our bodies are covered. The pores are nature's provision for discharge of poison-laden matter and worn-out tissue, the elimination of which is absolutely essential to perfect health. There is no better means of keeping the pores open and cleansed of impurities than by regular use of Thermal (Hot-Air and Vapour) Baths. Soap and Water cleanse the outer surface of the skin only. Thermal Baths stimulate the pores into vigorous, healthful action, increase the circulation, tone up the entire system, and produce that delightful feeling of invigorated health and buoyancy.

Physicians recommend

FOOT'S BATH CABINET

for the prevention and cure of Colds, Influenza, Rheumatism, Liver and Kidney Complaints, Skin Affections, etc. Every form of Thermal Bath (plain, medicated, or perfumed) can be enjoyed privately in one's own room. Foot's Cabinet possesses several exclusive advantages.

Write for Bath Book B7.

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Avoid Gout

DRAWN from the famous "Célestins" springs at Vichy, and bottled under State supervision, this famous Mineral Water is an acknowledged and proven defence against gout, diabetes and the early stages of chronic affections of the urinary passages.

Vichy-Célestins should be taken regularly at meals, either in its pure state or it can be mixed with light wines or spirits. Obtainable at all Hotels, Clubs, Chemists, Stores, etc.

The French Natural Mineral Water



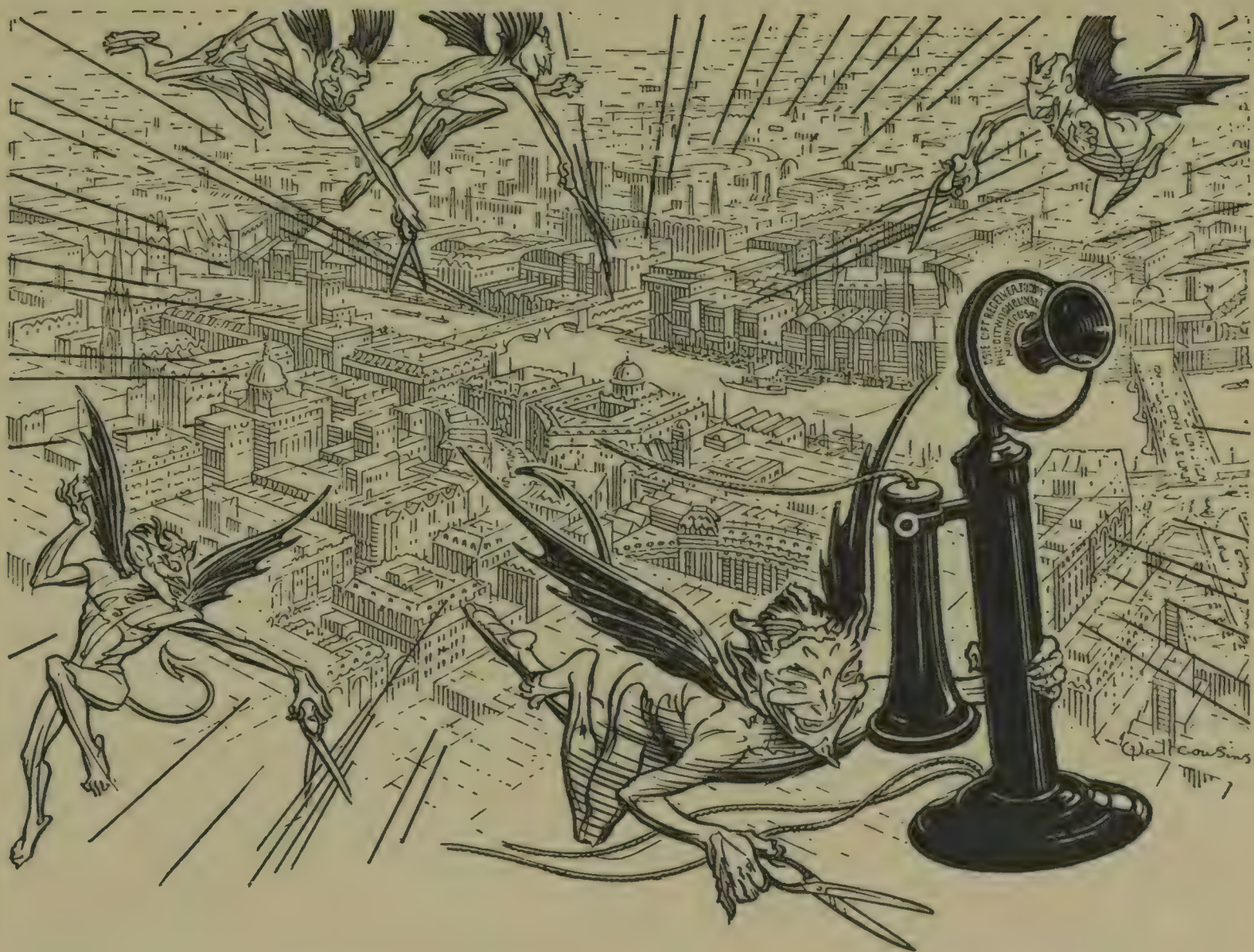
VICHY-CELESTINS

CAUTION.—See that the label on the bottle bears the name of the Sole Wholesale Agents:

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WONDERS OF THE TELEPHONE

II.—If all the Lines were cut !

Supposing one day we woke up to find that all the telephone lines were cut ; and supposing they remained cut for, say, forty-eight hours.

How many million pounds' worth of business would be lost ?

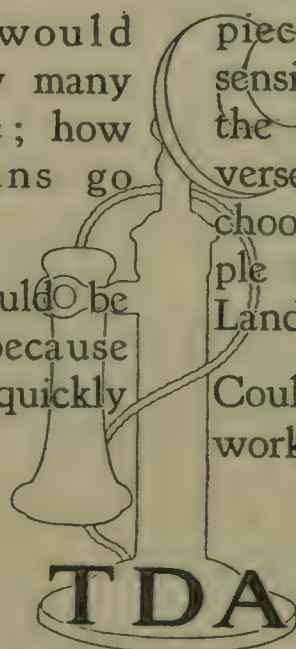
How many fires would rage unchecked ; how many burglars work immune ; how many pleasure plans go wrong ?

How many lives would be lost or endangered because medical aid could not quickly be made available ?

How many—but imagination cries a halt. For the mind cannot conceive that life as we live it could be supported without the omnipresent aid of the telephone.

It stands at your elbow. Talk through that friendly mouth-piece, listen through that sensitive ear. A motion of the hand, and you may converse with whomsoever you choose out of millions of people from John o' Groats to Land's End.

Could any legendary Merlin work a greater magic ?



RADIO NOTES.

BROADCASTING includes yet another royal home among its devotees, for the King and Queen of Italy have just installed receiving apparatus in their private residence, the Villa Ada, on the outskirts of Rome; while at the Quirinal, their official palace in Rome, the auto-broadcast system is in course of installation. This system affords control in each room by means of a switch. The receiving apparatus is placed in a convenient part of the residence, and wired to each of the rooms to loud-speakers. These are operated by a switch, on exactly the same principle as electric lighting, the switch in this case controlling the valves of the receiving-set.

The honour of this command has fallen to a British firm, Burndeft, Ltd., of Aldine House, Bedford Street, Strand, W.C., and the apparatus installed in the Villa Ada and the Quirinal is their standard model, the Ethophone V, with Ethovox loud-speakers in conjunction with their Auto-Broadcast system. A further Ethophone V has been ordered for the special use of the Prince of Piedmont. The Auto-Broadcast system, mentioned above, reduces broadcast reception to the final limit of simplicity: music or speech may be switched on in any room just as easily as turning on electric light. When one of the loud-speakers is switched on, relays are actuated to bring the receiving apparatus into operation. Loud-speakers elsewhere in the same residence may be switched on without detriment to reception in any other room. The act of switching off whichever loud-speaker is last in use also disconnects the distant receiving-set, the valves being extinguished automatically.

This week, the B.B.C. has commenced a thrice-weekly "alternative" programme, transmitted from the high-powered station, 5XX Chelmsford. Hitherto, most of the transmissions from 5XX have been relayed from programmes issued by one of the other

stations, and to owners of long-distance receivers reception of the original station could be obtained almost as easily as from 5XX. The new arrangement will now enable many listeners to receive a programme additional to the ordinary stations.

The American station, WJZ, is broadcasting every Wednesday a series of weekly question contests, in which radio listeners compete for a cash prize of fifty dollars. Fifty questions are announced based

place in the news of the week. A sample question reads as follows: "A revolt was experienced in Tripoli. What European nation holds sovereignty there?"

A novel method for use during the transmission of plays especially written for broadcasting has just been introduced in 2LO's Studio. In the past, performers were restricted in their movements near the microphone by having to refer to manuscripts for their lines. Thus, in the case of a drama, when sounds play an important part in assisting the imagination of radio listeners, any action or "business" on the part of artists was liable to interfere with the continuity of the story. Now, however, the studio is darkened, and a lantern slide of each page of the manuscript is projected on to a screen, to be seen by the various performers, irrespective of positions rendered necessary by their actions. For example, by the new method, a heroine near the microphone is able to appeal for help, whilst the hero and the villain are heard struggling on the floor several yards away; but all of the spoken words are heard by listeners at the proper moment, whereas, by the old method, some of the realism conveyed by sounds of action was apt to be lost through the performers having to take care of their lines.

Only one class of receiving license is issued now, and it may be obtained from post-offices for ten shillings yearly. The old licenses, "Broadcast" and "Experimental," have been cancelled, and are superseded by the new general license. Anyone who desires to use or make apparatus for listening to broadcasts, or for experi-

mental purposes, need only go to the local post-office, fill up a short form, pay ten shillings, and receive the license at once—almost as simple as buying a postal-order.

On Tuesday, Jan. 20, a complete performance of Mozart's opera "Figaro" will be transmitted from the London broadcasting station, and relayed from all other stations except Chelmsford. W. H. S.



BROADCASTING AIDED BY THE OPTICAL LANTERN: A NEW METHOD AT 2LO.

When dramas are broadcast, sounds of action are necessary for conveying a sense of realism to the imagination of listeners. Often, in the past, performers were unable to refer to their lines whilst engaged in a scuffle, for example, but now, with the lines projected on to a screen, the words may be seen, however tense the action may be.—[Photograph by Barratt.]

upon the news of the past week, five seconds being allowed after each question for listeners to write their answers down. To the listener answering by post the greatest number of questions correctly, the prize is awarded. In the event of a tie, the prize is divided. The questions are on subjects of national and international interest which have occupied a prominent



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quickly ensures a brilliant finish to Furniture, Stained or Parquet Floors and Linoleum.

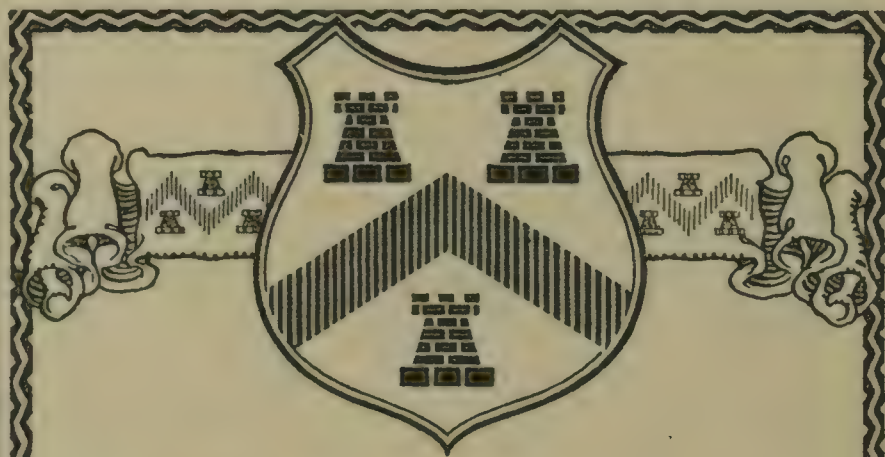
To revive the colour and figuring of the wood, Dark Oak Furniture and Floors should be polished with

DARK MANSION POLISH

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Makers of the Celebrated Cherry Blossom Boot Polish.



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10's carton 8^d
20's boxes 14^d

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(Hand made)
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Branch of The Imperial Tobacco Co. (of Great Britain and Ireland), Ltd.

T.C.3

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MORE THAN A BATH SALT.

Medicates and oxygenates the water
Quickly—Efficiently—Safely
and as **nothing else can.**

As this wonderful "saltrated" water soaks in—the pains always soak out. For stiffness, swelling and the throbbing, gnawing agony of acute muscular rheumatism Reudel Bath Saltrates stands unrivalled. It never fails and is absolutely in a class by itself, although many imitators have made unsuccessful attempts to reproduce this truly remarkable formula.

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As by far the most widely used medicinal bath preparation Reudel Bath Saltrates has stood the test of practical use for fifteen years. Its sales and popularity are increasing every day. This means something. Ask your own chemist what users say about it.

Many millions of packets have been sold, each one always containing an **unqualified** money-back guarantee. No purchaser can assume the slightest risk of dissatisfaction or loss if he insists upon getting the genuine REUDEL Bath SalTRATES. All chemists have it, in packets of convenient sizes and at low prices.

Waterman's Ideal Fountain Pen

"My Birthday Gift"



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CUTICURA



Because of its purity and delicate emollient properties. The Soap, used daily, cleanses and purifies the skin and does much to keep it clear, fresh and youthful. The Ointment soothes and heals irritations which if neglected might become serious. Nothing better for daily toilet uses.

Soap 1s., Talcum 1s. 6d., Ointment 1s. 3d. and 2s. 6d.
Sold everywhere. British Depot: F. Newbery & Sons, Ltd., 27, Charterhouse Sq., London, E.C.1.
Cuticura Products Are Reliable.

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"Quality Sale"

TO-DAY and Daily

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Bargains
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MADE LACE DEPT.

House Coatee in Black Chiffon Velvetene, beautifully cut and well made.

Special Bargain **35/9**

EXCEPTIONAL
Bargains in Fine
Quality Silks and
Dress Goods.

PRINTED MAROCAIN, CREPE-DE-CHINE AND GEORGETTE

A large variety, including many of our last season's designs, for Scarves, Dresses, Jumpers, Linings, etc., all reduced to make room for new stock. Double width. Usual prices 12/11 and 16/11.

Sale price, per yard **7/11**

MATELASSE

An Artificial Silk Brocade, suitable for either long or short Coats, both for present and Spring wear, well-covered design. Shades in Wine, Mole, Nigger, Navy and Black. The design always outlined with fine Grey stitching. Very smart new goods. 35-36 ins. wide.

Sale price, per yard **8/11**

**REMNANTS
HALF-PRICE
THURSDAYS**

A Genuine Sale of Quality Attire for the Gentlewoman, also Soft Furnishings, Linens and a wonderful selection of bargains in Juvenile Attire.

Further Reductions
during last week of
Sale



LACE VEILING DEPT.

This fashionable three-quarter length Tunic is of Heavy Gold Metal Allover, and is of excellent shape and design, trimmed at foot with Brown Fur and ornamented at side with metal cord.

Price **3½ Gns.**

Also to be had in Oxydised.

VELOUR DE SMYRNE

This fashionable soft draping material for Gowns and Wraps in shades of Beige, Pale Almond, Grey, Elephant, Light Navy, Wine, Claret, Bottle, Smoke Blue, limited quantity only, 42/44 ins. wide. Usual price 19/11

Sale price, per yard **8/11**

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LUXURY WITH COMFORT
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EXTENSIVELY IMPROVED
AND ENLARGED.

ENTIRELY REFURNISHED.

NEW RESTAURANT AND
GRILL-ROOM.—FAMOUS CHEF

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ORCHESTRAS**

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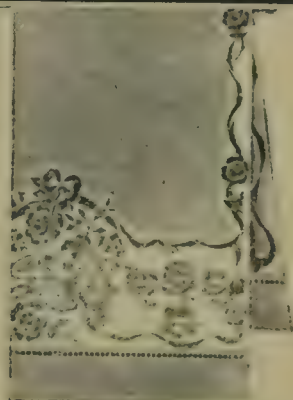
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The finest the world produces

Winter Sale

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HOUSEHOLD LINENS**

Genuine Reductions.
Guaranteed Qualities.



LINEN TOWELS

No. 41.—FINE LINEN HUCK FACE TOWELS, with Damask Border. Hemstitched. Size 24 x 40 inches.

Sale Price. Dozen **47/6**

BLANKETS

AT TO-DAY'S COST OF PRODUCTION
PURE ALL WOOL with nicely raised surface and blue borders. For Single Beds 62 x 82 ins. Weight 5½ lbs.

Sale Price. Pair **22/9**

The Best Value in the Kingdom.
We Pay Carriage within the British Isles.

175-176, SLOANE ST., LONDON, S.W.1
89-90, NEW BOND ST., LONDON, W.1
108-110, KENSINGTON HIGH ST., LONDON, W.8

THE CHRONICLE OF THE CAR.

The Dazzle Problem.

Although we do not hear so much about dazzling head-lights as we did a year ago, the problem nevertheless is still with us, and leads occasionally to much discussion. Frankly, I do not believe there is any real solution of the question, because, as I think I have before argued in these notes, you cannot have light at all without a corresponding amount of dazzle. There are ways and means of mitigating the undoubted inconvenience of bright lights, but you simply cannot eliminate it altogether. The principal issue, then, is to discover the best of the alternatives, of which many have been put forward as being the last word. There are three ways in which we can reach the desired end. First, there are special lamp bulbs which are of undoubted assistance. The C.A.V., with its double filament, is excellent, and, if the driver will only take the trouble to use it rightly, it certainly minimises dazzle,

driving quality of the light, and yet is fairly free from dazzle.

Next, we have lamps which keep the light-beam below the eye-level of the advancing driver or pedestrian—e.g., the Moonbeam. Such lamps are so constructed as to cut off the upper part of the beam so that no direct light is projected above 4½ ft. from the ground-level. They are very effective, but are a little disconcerting to drive behind until one has got thoroughly used to them. Drivers who use their observation at night are well aware of the fact that the first thing one usually can distinguish when meeting or overtaking a person walking is the white collar, if any, then the face, followed by the lighter parts of the clothing. Using a lamp of the Moonbeam type, the same pedestrian appears as a headless ghost and, obviously, one does not see him as soon. Still, when the first weirdness has passed off, such lamps are quite effective.

Lastly, there is the dipping head-light, which I rather prefer to the others. It has merits all its own, though these are accompanied by the defect that it depends upon the driver's sense of courtesy for its use. By throwing the light-beam down on to the road the same effect as that of the Moonbeam type is produced and dazzle is quite eliminated. For driving in fog the dipping head-light is excellent, because by throwing the main beam on to the road about twenty feet in front of the car, one does not get that dreadful white blanket so familiar to those who use their cars much in the winter. But, as I have said, there is a type of driver who regards all such devices as being for his own convenience rather than for that of others. That is a trouble which is common to all anti-dazzle inventions which are not automatic.

responsible for this last effort has done his work quite well. The volume before me covers some 450 miles of roads in the South of England, between London,



ON DEVIL'S ELBOW (GRADIENT 1 IN 6): A WOLSELEY "FIFTEEN," WINNER OF THREE GOLD MEDALS IN THE LONDON-TO-EDINBURGH TRIALS (1922-3-4).

to a very marked degree. Then there is another bulb, known as the Price, which depends upon an orange-coloured glass cone for its qualities. It, again, is quite good in that it does not destroy the

has just reached me. Of the making of guide-books there is literally no end, and I do not envy the task of the compiler of such a work who sincerely desires to go one better than the last. I must say that whoever is

An Excellent Road Series.

The Dunlop Company is issuing a series of

pictorial road plans, of which the first

THROUGH THE HEART OF "RED" RUSSIA BY MOTOR-CYCLE AND SIDE-CAR WITH DUNLOP TYRES: LIEUT.-COMMANDER FREWEN ARRIVED AT KIEFF, BY A ROAD SAID TO BE THE WORST IN EUROPE.

Lieut.-Commander Frewen was accompanied on the trip through Russia by his sister, who doubtless took the above photograph.

Brighton, Worthing, Eastbourne, Hastings, Folkestone, Dover, and Margate. A clear red road runs from bottom to top of the thirty-seven maps, and on each side are delightful little sketches of taverns, cathedrals, bridges, and castles, which abound in this part of the country. Regular sea-level figures show how the roads are graded—quite a useful feature. The first three volumes, I understand, will cover the whole of the South of England and South Wales. W. W.



Lanchester Cars

THE high reputation of Lanchester Cars, won by years of experience and leadership, is enhanced by the Lanchester "Twenty-one." This latest production embodies all those features which experience has shown to be most desirable and which are expected in a high-grade car, including the Lanchester Patent Four-Wheel Brakes, the simplest and safest method of four-wheel braking yet devised. It is a car of the quality that preserves leadership, and is in every way worthy of its long line of famous predecessors.

The LANCHESTER MOTOR CO., LTD.,
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A trial run will convince you that there is nothing quite like the Lanchester. Will you make an appointment?



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A First Class Distillery,

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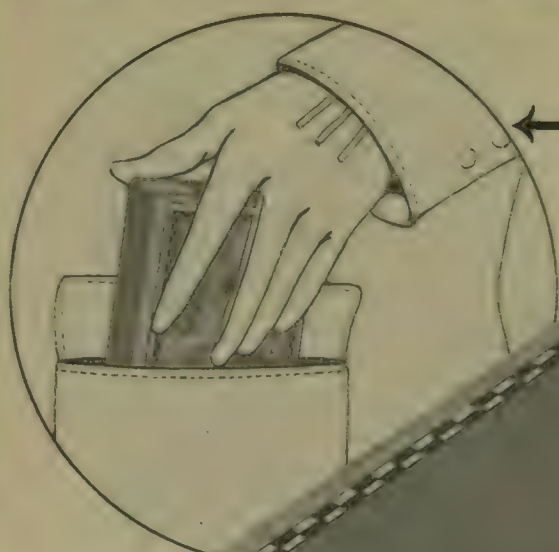
Supplied in
Bottles
Half-Bottles
Quarter-Bottles and
six other shapes.



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"ARMY CLUB" Cigarettes are *perfect* in size. The pure *old matured* Virginia Tobacco is rolled in *pure ribbed rice* and *watermarked paper*. Free from injurious printer's inks.

Each packet and tin is wrapped in a *sealed, air-tight, dust-proof* and *germ-proof* wrapper.

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Fashions and Fancies.

The Vogue for Queen Anne Furniture.

Those well-known experts, Hamptons, of Pall Mall East, S.W., affirm that Queen Anne furniture is very much in vogue at the moment, and will be for some time. Devoid of all unnecessary exterior decoration, this style achieves beauty by its graceful curves and the beautiful woods employed. Pictured on page 106 are some fine reproductions which

may be seen at Hamptons. The perfectly proportioned cabinet, chair, and stool are built in figured walnut, and the easy chair on the left is covered with printed linen in a Queen Anne design. The tall lamp is also of walnut wood, fitted with a rich wine-coloured silk shade, and on the floor is a genuinely old Persian rug in beautiful colourings. It is certainly an attractive scheme of furnishing, and one that will withstand nobly the strain of these strenuous times.

Furnishing Bargains.

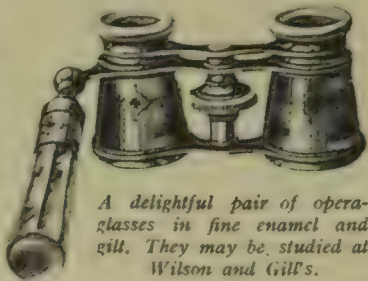
There are still a few more days before the sale at Hamptons ends on Jan. 24, so immediate advantage should be taken of this splendid opportunity. Beautiful cretonnes have been substantially reduced, in some cases to less than half their original cost, and linoleums and curtain fabrics too. The whole of Hamptons' immense stock

A desirable gold and enamel watch from Wilson and Gill.

of carpets are included in the sale at greatly reduced prices. Seamless Axminster carpets range from £2 3s. 9d., size 7 ft. 6 in. by 6 ft.; and Wilton rugs from 19s. 6d., size 4 ft. 6 in. by 2 ft. 3 in. An illustrated catalogue giving full particulars will be sent free on request.

Jewelled Novelties. Each day in the calendar is somebody's birthday or marks some special anniversary, and pictured

here are some delightful gift suggestions offered by Wilson and Gill, the well-known jewellers of 139, Regent Street, W., for 1925. The enamel toilet set on the right is obtainable in lovely colourings, and a set comprising five pieces is £20 10s. The fact that the enamel does not require constant cleaning is a distinct advantage. The neat oval-shaped watch in gold with an enamel border costs £7 5s.,



A delightful pair of opera-glasses in fine enamel and gilt. They may be studied at Wilson and Gill's.

and £1 10s. is the modest cost of the finely cut crystal scent-spray below mounted in plain silver, or £2 2s. in silver-gilt and enamel. An attractive and useful present is the pair of opera-glasses in fine enamel and gilt, with an extending telescopic handle. They are £7 5s., others are £4 15s. without the handle. And, in connection with glasses, a note must be made

A Host of Bargains.

of the fact that Wilson and Gill have opened an optical dispensing department for the purposes of supplying spectacles, lorgnettes, etc., to any prescription. This salon is under the skilled supervision of Mr. F. E. Lawson Clarke, F.S.M.C., D.B.O.A. An illustrated brochure containing many other useful suggestions will be sent free on request.

There is still a host of bargains



A fine cut crystal scent-spray mounted in silver which hails from Wilson and Gill.

12s., and attractive bridge coats in velveteen bound with braid are 24s. Ribbed wool cardigans for 15s., and spun-silk stockings, slightly defective, at 3s. 4d. a pair are other useful prizes. An illustrated catalogue will be sent free on application.

A Sale of Rainproof Wraps.

After the deluge of rain which we have already experienced this year, everyone will admit that a reliable waterproof wrap is indispensable in this watery climate of ours. Consequently, it is splendid news that Elvery's, the well-known firm of 31, Conduit Street, W., are holding a sale which is now in progress. All prices have been much reduced. There are a number of silk and satin waterproofs marked at 2½ guineas each, and their famous featherweight silk mackintoshes are

59s. 6d. and £3 3s. Cashmere waterproofs have been reduced from 3 guineas to 48s. 6d.; while wrap-coats in West of England coverts, triple rainproofed and man-tailored, are 69s. 6d. and 79s. 6d. A collection of odd coats and mackintoshes is to be cleared at 1½ guineas each. Every sports enthusiast must investigate the new short coat of featherweight silk specially designed for golf. Complete with a little case which straps on to the golf bag, the price is 3 guineas.



A toilet set in turquoise-enamel which may be obtained from Wilson and Gill, 139, Regent Street, W.

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Situated on the Finest Boulevard of Nice,
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200 BEDROOMS. 100 BATHROOMS.
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ASTHMA CURE

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The most luxurious Palace on the Riviera.

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And in 1-lb. and ½-lb. Fancy Boxes.

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Cleans Carpets Like New

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CURES EVERY SKIN ILLNESS

A cooling liquid cream for eczema, rashes, etc. Instant Relief, 1/3 and 2/6 pots. Supplied the world over. Estab. 1885.

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tints grey or faded hair any natural shade desired—brown, dark brown, light brown, or black. It is permanent and washable, has no grease, and does not turn the hair. It is used by over a million people. Medical certificate accompanies each bottle. Of all Chemists, Stores and Hairdressers. 26 The Flask.

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**DRI-PED SOLED
FOOTWEAR**

in all styles and sizes for men, women and children, is obtainable from all leading footwear stores, including all branches of:

Dolcis Shoe Co.
Upsons Ltd.
High Life Shoe Co.
W. Abbott & Sons, Ltd.
Lilley & Skinner, Ltd.
Lennards, Ltd.
Crick & Co.
Jacksons Ltd.
Civil Service Association.
London Boot Co.
&c.

DRI-PED REPAIRS

Your footwear repairer can re-sole the shoes you are now wearing with "Dri-ped" Leather.

SHOE quality is determined by the soles. Neither smart design nor shapely last, nor clever workmanship, nor skilful stitching can make a worth-while shoe if the sole leather is of doubtful durability, of questionable waterproofness.

Sole leather of dependable quality is not common, since leather is a natural product, but there is one leather, produced from a careful selection of the finest obtainable hides, tanned by a special process which is ever consistent—"Dri-ped" the famous super-leather for soles.

This leather is guaranteed waterproof; guaranteed to give double wear. It ensures greater foot comfort, freedom from wet-feet chills. It helps shoes to retain their style longer. Many leading footwear manufacturers have selected "Dri-ped" for leading ranges of men's, women's, and children's footwear.

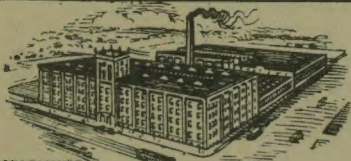
DRI-PED LTD. BOLTON, LANCs.

CAUTION.

If soles are stamped with any mark other than the "Dri-ped" diamond in purple, beware of substitution. "Dri-ped" is not merely a brand name—it identifies the best sole leather you can obtain. In case of difficulty please write to:—

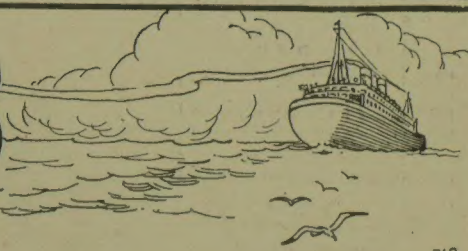


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DRI-PED SOLED FOOTWEAR

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THE HOME OF
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MONTREAL, CANADA
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British Consols
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You can get **British Consols** on any Liner of **C.P.R.—ANCHOR DONALDSON—CANADIAN G.M.M.—WHITE STAR—DOMINION**

719



BURBERRYS'
SALE of Men's, Women's and Children's
Weatherproofs, Overcoats, Suits and Gowns
TO-DAY & DURING JANUARY.

Sale Catalogue post free on request.

BURBERRYS LTD. HAYMARKET S.W. 1 LONDON.

MISCELLANEOUS.

KENSINGTON is fortunate in possessing a municipal authority that appreciates the æsthetic side of public life, and does much to promote an interest in art among the citizens of the royal borough. The Kensington Committee of Civic Art, whose patron is Princess Louise Duchess of Argyll, and the president Alderman Sir A. J. Rice-Oxley, has just opened in the Town Hall an exhibition of water-colour paintings by many of the foremost artists of to-day. The show is the sixth that has been held there, and it is hoped to make it a permanent event. The Town Hall also contains a fine collection of loan and gift pictures (apart from the portraits of the Mayors) hung in the large hall and on the staircase and landing. This collection, to which additions are gradually being made, gives the Town Hall a distinctive artistic character.

Many of our readers will be interested to hear that a new edition of Burke's "Landed Gentry" is being prepared for publication in February. The publishers will be glad to learn of any changes in the ownership of estates or old houses which have taken place since 1921, when the last edition was issued, and on request will at once send the necessary

information forms to be filled up. Their address is The Burke Publishing Company, Ltd., 43, St. Martin's Lane, London, W.C.2.

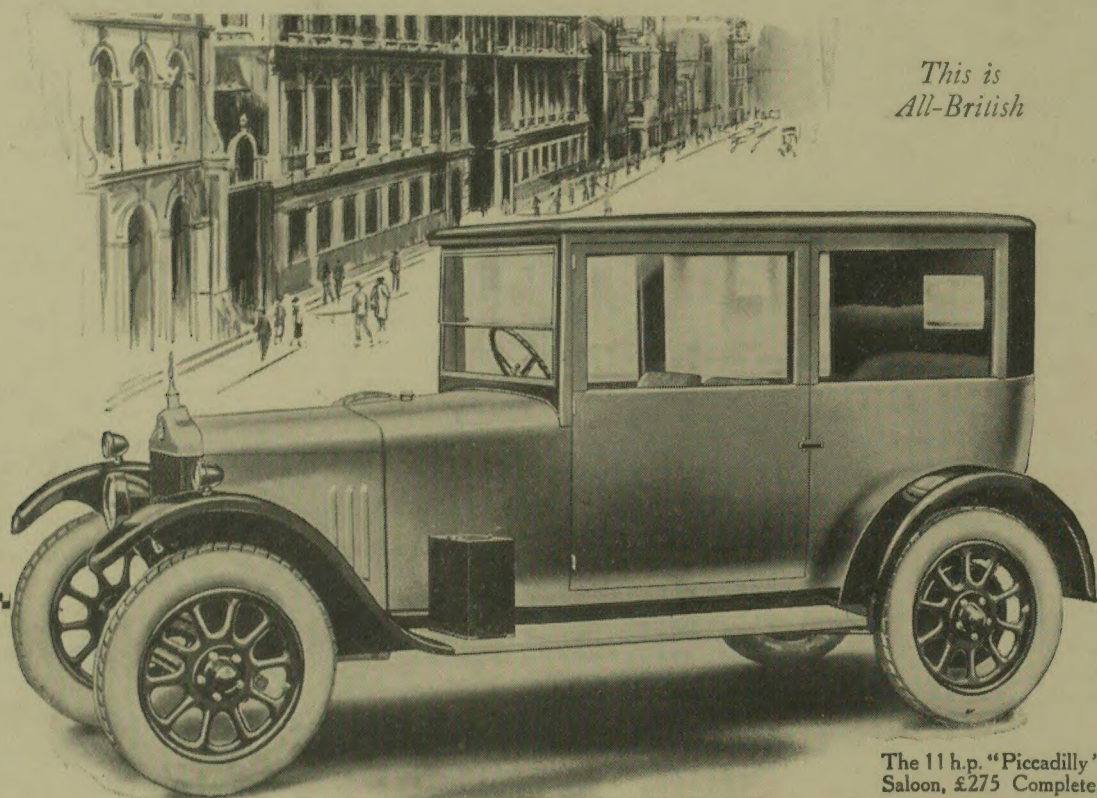
Art and music lovers will welcome the appearance of a new monthly magazine entitled *Apollo*, a Journal of the Arts (2s. 6d. net), published by the Apollo Press at 6, Robert Street, Adelphi. It is edited by R. Sydney Glover, and the first number, for January 1925, which is beautifully printed and produced, gives the venture an excellent start. The contents include many interesting literary contributions, five admirable colour-plates, besides much black-and-white work, book reviews, and notes on art and music. M. Paul Lamotte, Director of Fine Arts for Belgium, writes on the altar-piece in the Cathedral of St. Bavon at Ghent, his article being accompanied by a fine reproduction in colour of Hubert van Eyck's famous wing-panel, "The Adoration of the Mystic Lamb," surrendered by Germany since the war. Among the illustrations Mr. Frank Brangwyn is represented by "A Venetian Palace," in colour, and two etchings. Two of the other colour-plates are examples of Roland Strasser, whose art is the subject of an article by Sir Michael Sadler. Mr. Joseph Holbrooke discusses "A Composer's Ideals," and Mr. A. J. Finberg contributes "With Turner at Geneva," illustrated by his pencil sketches.

When Christmas and New Year festivities are ended, the cellar usually stands in need of replenishing, and Dunville's Special Liqueur Whisky is in constant demand. It is supplied in half-bottles, quarter-bottles, and six other shapes. Since 1808 Dunville's Whisky has enjoyed a far-famed reputation, and connoisseurs of good wines and spirits are unanimous in their appreciation of this well-known brand, which has stood high in popular favour for considerably more than a century.

With an attractive two-colour cover designed by the famous artist Garth Jones, the 1925 edition of "The Green Book of Prophecies" is now ready. The Zam-Buk Company, Leeds, will be pleased to send a copy free to any of our readers who care to apply for one by postcard.

The Aster Engineering Company (1913), Ltd., of Wembley, have recently been honoured with an order from his Royal Highness the Duke of York for an Aster 20-70-h.p. sports chassis mounted with a special four-door saloon, body of their own construction.

A 30-98-h.p. Vauxhall driven by Mr. H. Bartlett in the recent six days' reliability touring contest held by the Royal Automobile Club of Australia made the fastest time in the flying half-mile, and also in the two hill-climbs.



*This is
All-British*

The 11 h.p. "Piccadilly"
Saloon, £275 Complete.

HOSPITAL Competition

Have you purchased a Competition Post Card? You may win a "Piccadilly" Saloon for 1s. The whole of the proceeds are devoted to Hospital Funds.

The Competition closes on the 31st January. Tickets can be had either direct from the Company's Works, Coventry, or from any of the Company's Agents.



A Saloon for £275

AT almost the cost of a touring car the new 11 h.p. "Piccadilly" Saloon is at £275 the best value in light enclosed cars. It is a British all-the-year car at low cost.

Ample room for four. Plenty of leg space. Everyone comfortable. Two wide doors make it easy to get in and out. The finish is good and the fittings are complete.

Front seats are adjustable bucket type. Cushions are deep. Upholstery is in cloth. Body painted "Standard" fawn, blue or crimson, with all bright parts nickel plated. Dunlop low pressure or cord tyres.

The All British Standard 11 h.p. "Piccadilly" Saloon £275

Other 11 h.p. models from £200 14 h.p. models from £345
"Pall Mall" Saloon £475
"Portland" Saloon £375

Front Wheel brakes on either 14 h.p. model £10 extra
Dunlop Balloon or Cord Tyres

The Standard Motor Co., Ltd., Coventry.
London Showrooms: 49, Pall Mall, S.W. 1.

"COUNT . THEM . ON . THE . ROAD"

NICE. Astoria Hotel

Recent and modern construction. Every comfort, full South, large garden.
MODERATE TERMS. A. UHRING, Prop.



LT.-COL. RICHARDSON'S
AIREDALES
The Best Watch Dogs
Specially Trained for house protection against burglars; best guards for ladies living or walking alone; safe children, not quarrelsome; from 10 Gns.; pups, 5 gns.; large selection on view daily. Trains every 15 mins. from Waterloo. "Clock House," Weybridge (near Brooklands) Surrey, Tel. Byfleet 274



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8 hours from Southampton
18-hole Golf.
The most equable climate.
The most reasonable terms.

CRYSTAL HOTEL, 1st class inclusive, from 35 fr.
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Concerning DOGS

If you need help and advice in the SELECTION, BREEDING, REARING, TRAINING, and EXHIBITION of DOGS, no matter what breed, write to "The Editor—

The Illustrated Sporting & Dramatic News
15, ESSEX ST., STRAND, W.C. 2,
who will be most pleased to help all those who are in doubt.

Always ask for
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BRACES, GARTERS, SUSPENDERS
Each pair bears manufacturer's guarantee.
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THE ONE SAFE REMEDY
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Post Free
TATCHO-TONE
Medical Guaranty with each bottle.
Chemists and Stores. Price 4/6.
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The Great House for Motor Coats.

Whilst every one of the Motoring Sections of the great Gamage Store consistently offer Remarkable Value, it is in the sphere of Clothing that they are unrivalled in the World. Also

for Liveries, Tyres and Accessories they cannot be surpassed.

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Every Motorist should have A COPY of Gamages New Illustrated MOTORING CATALOGUE containing Values in Clothing and everything from a complete car to the smallest Accessory. Post Free on Request

TAN LEATHER MOTOR COATS.

Magnificent Fleece-lined Coats cut from the finest skins. Double-breasted, as illustration, wind cuffs in sleeves, belt all round, full cut wide skirt, well covering knees.

Price **95/-**

Stocked in all sizes up to 44 chest. Chest measurement should be sent when ordering.

OWNER - DRIVER'S

TAN LEATHER UNDERCOAT.

An indispensable garment for cold weather, giving ample protection against the most biting winds. A neat inside wind flap in a distinctive feature, and elastic wrist cuffs prevent any draught up the arms. Made from soft and pliable selected skins. A most practical garment for motorists.

Price **63/-**

Stocked in all sizes up to 44 ins. chest. When ordering by post please give size round chest over waistcoat.

A. W. GAMAGE, LTD., HOLBORN, LONDON, E.C.1.

At the Théâtre des Champs-Élysées PARIS

THE

"BAL DE LA COUTURE"

(the most fashionable Ball of the year), organised by the Chambre Syndicale de la Couture for the benefit of its Charitable Institutions, will be held on

Saturday, February 14th, 1925

GRAND MANNEQUIN PARADE.

LOTTERY of 50 Dresses from First - Class Houses.

ARTISTIC TURNS. SUPPER.

Admittance (including Lottery) 100 Francs.

Price of Seats from 10 to 100 Francs.

For Tickets apply to the Président du Syndicat de la Couture, 3, Rue de la Paix, Paris, or at the Théâtre des Champs-Élysées, Paris.

TABLES FOR SUPPER CAN BE BOOKED IN ADVANCE.

TAKE
TWO
AT
BED-
TIME



Baby Ainsworth.

and note how well you sleep, and how refreshed and fit you feel in the morning,

Nerve Weakness

and Loss of Appetite.

Baby Ainsworth, as the result of concussion, became too weak to stand, but now, thanks to Cassell's Tablets, she's a bonnie little girl again.

Baby Ainsworth's Case.

Mrs. E. Ainsworth, of 32, Strode Road, Stamshaw, Portsmouth, Hants, writes as follows:—"Two years ago my little girl Eva suffered slight concussion through a fall whilst at play. Subsequently I could not get her to eat anything.

The Universal Home Remedy for

Nervous Breakdown Neurasthenia Kidney Weakness
Neuritis Headache Children's Weakness
Indigestion Anaemia Weakness
Sleeplessness Palpitation Wasting
Specially Valuable for Nursing Mothers and During the Critical Periods of Life.

She became too weak to stand, and the various things we tried did her no good. My mother advised Cassell's Tablets, and from the time I commenced to use them I could see an improvement. She is now a bonnie girl of six, as you will see from her photo. I have recommended them to several people, and all have experienced good results."

Dr. Cassell's Tablets

Home Price, 1/3; Family Size, 3/-.
Sold by Chemists and Stores throughout the Empire.

For sponging
Clothes and
Carpets.

SUTTON'S

For Cleaning
Windows.

Cloudy Ammonia.

Sole Makers: G. F. Sutton Sons & Co., King's Cross, London, N.7



A matter of moments

When it comes to time there is no razor—no type of razor—that can compete with the Kropp.

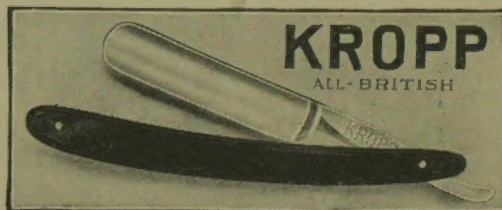
This Sheffield razor is constructed for long, sweeping movements, and its perfect balance makes for absolute steadiness. It is the perfect shaving implement.

In case, Black Handle, 10/6
Ivory Handle, 18/-

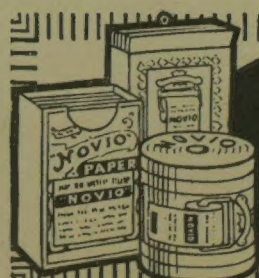
From all Hairdressers, Cutlers, Stores, etc.

Send post card for a copy of "Shaver's Kit" Booklet No. 71

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The Man's Size
CIGARETTE

SILK CUT VIRGINIA

20 for 1/5

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